## Planning a Ground Offensive I: The CINC's Study Group

The popular view of the Persian Gulf War, at least in the Army, is that it was a war of maneuver. It was nothing of the sort, at least not if "maneuver" is viewed as the psychological undermining of an enemy by movement alone. Viewed from the theater level, Desert Storm was a war of attrition based upon air power. Coalition air forces disrupted the Iraqi national command and control structure, won air supremacy (unopposed freedom of action in the air) early, and then prepared the theater of operations through a program of continuous bombing. Some still believe air power worked so well that the ground operation only reaped the effects achieved from the air, effects which, given a week or two more, would have led to an Iraqi withdrawal without a ground attack at all.<sup>1</sup>

The ground attack was ultimately a necessary but clearly dependent and contingent part of the theater campaign plan. Time was running out. As the holy month of Ramadan approached (starting 15 March), to be followed by the end of the cool season and the heat of the Arabian summer, the impasse with Iraq had to be broken.<sup>2</sup> Looking ahead, it was becoming increasingly impossible to gamble that air power would compel Saddam's withdrawal without ground action to force the pace.

Nonetheless, the ground offensive was seen to depend absolutely upon the air arm's success in achieving air supremacy. This dominance would free the ground forces to reposition to the west, build up the massive supply bases required for mechanized warfare, and concentrate for attack without interference. Ground commanders from General Schwarzkopf to the lowest armored battalion commander believed that success on the ground depended on the Air Force inflicting significant destruction upon enemy ground forces, particularly the artillery and armored reserves who were believed to outnumber coalition forces greatly and to be well armed and capable of tough resistance. Most analysts assumed Iraq would employ chemical weapons, particularly once threatened with defeat.

Army commanders did not doubt that the execution of a ground attack would be necessary at some point, first, to drive dug-in enemy formations above ground so that they would be subject to destruction by both ground and air attack; second, because liberation of Kuwait

ultimately required taking possession of territory—Kuwait itself, as the primary mission, and southeastern Iraq, to ensure negotiations. The ground offensive was planned and conducted in accordance with the Army's AirLand Battle doctrine. Developed during the decade following the U.S. defeat in Vietnam, AirLand Battle doctrine is an application of classic twentieth-century maneuver theory for mechanized forces.

Since the attack on the Somme in World War I, ground maneuver commanders have tended to discount the disruptive effects of fire, even though it forms the basis of any army's minor tactics. They prefer to think of operational maneuver, in which fire plays a subordinate and supporting role as the key to unlocking enemy defenses. Indeed, two competing views of modern mechanized warfare might be characterized loosely as the romantic and the realist. The romantic view is often associated with B. H. Liddell Hart and his concept of the indirect approach. This view emphasizes dislocation of the enemy as the objective of maneuver. Indirection and speed of execution are the means. These hold out the ideal of so upsetting the enemy by operational movement that no tactical engagement at all is required to bring about the foe's destruction. For Liddell Hart, the characteristic maneuver of the indirect approach in ground warfare was the turning movement, with the hope that seizure of position alone might cause the enemy to surrender or at least force him to battle where the operational attacker had the advantage of the tactical defense.

The realist's view of armored warfare was based upon the more Jominian tradition of achieving victory by the successive destruction of fractions of the enemy's force by masses of one's own. Best articulated in the works of J. F. C. Fuller, the benefit of mechanization had to do largely with the ability of mechanical transport to concentrate forces rapidly against more vulnerable and more decisive rear areas before an enemy could react to the traditional rear attack.<sup>4</sup> For Fuller, battle, albeit on favorable terms, was the necessary end of maneuver; dislocation was but a means to a tactical end. In Fuller's view, speed of execution is a more relational concept because it is measured against the enemy's ability to respond before decision is reached, rather than on the psychological effect achieved. For Fuller, the envelopment was the more productive maneuver.

The Army's AirLand Battle doctrine, as articulated in FM 100-5, Operations (May 1986), reflected both views. The defining passage maintained that

The object of all operations is to impose our will upon the enemy.... To do this we must throw the enemy off balance with a powerful blow from an unexpected direction, follow-up rapidly to prevent his recovery and continue operations aggressively to achieve the higher commander's goals. The best results are obtained when powerful blows are struck against critical units or areas whose loss will degrade the coherence of enemy operations in depth.<sup>5</sup>

AirLand Battle doctrine assumed the synergistic employment of Air Force ground-attack systems both in support of the close (direct-fire) battle and in depth, interdicting enemy forces not yet engaged by ground forces or withdrawing beyond their reach. The doctrine assumed, implicitly, possession of air superiority.

These ideas formed the theoretical context within which plans were drawn up for the ground portion of Operation Desert Storm. Although the aerial isolation of the operational area south of the Euphrates, and the deep envelopment of the Iraqi front-line forces through the Iraqi desert, employed elements of indirection, Schwarzkopf placed himself ultimately in the realist camp by his selection of the Iraqi operational reserves, particularly the Republican Guard, as the focus of his attentions. Destruction of the Iraqi armored forces was part of his strategic and operational program. In fact, his analysis of his mission required it.<sup>6</sup> His hopes for the success of the attrition-ground preparation phase of the air campaign—to "open the window for initiating ground offensive operations by confusing and terrorizing Iraqi forces in the KTO and shifting combat force ratios in favor of friendly forces"7—indicate he was also no stranger to the value of dislocation, though his faith rested in fire more than maneuver.

A most important feature of planning for Desert Storm ground operations was the extent to which commanders themselves were involved in all key decisions. The plan itself had a hundred fathers, but no decision of consequence was taken except by the senior commanders. Therefore, some key events in the evolution of the plan must be set forth at the outset. The first was the theater commander's briefing to his commanders on 14 November. From that time on, what had been a closely controlled planning process grew horizontally and vertically in an environment in which each commander, from division level and above, had heard the general concept of operations from Schwarzkopf himself.

From the November briefing to early January, there were a number of key back-briefings—from the corps to Third Army, from Third Army to the theater commander, and on 20 December, to the secretary of defense and chairman of the Joint Chiefs of Staff—on the status of theater preparations for offensive action.

During the last week of December, Third Army held a map exercise (MAPEX) in Eskan Village, near Riyadh, attended by senior Army commanders and representatives of the other U.S. service components. This event provided the opportunity for the senior Army commanders and their staffs to work out the details of their plans. The staffs addressed those details that could be resolved and identified those that could not. After the formal sessions, the two corps commanders, the Support Command commander, and the Third Army commander retired to a conference room alone. There, closing discussions took place on the ARCENT concept of operations.

The MAPEX was followed by briefings to Schwarzkopf on 4 and 8 January. Schwarzkopf seemed to have misgivings but then renewed his confidence in the plan of attack. A final "commanders' huddle" was held by the Third Army commander on 1 February, then the secretary of defense and chairman were briefed again on the 9th. Subsequently, only decisions involving matters of detail and execution remained to be made, most contingent on the outcome of initial combat actions. These conferences and briefings constituted the major turning points in the planning process. Each marked a new advance in the evolution of the plan that led to the victory in Desert Storm.

The planning process for ground operations began in mid-September 1990. Central Command campaign planning had begun even earlier while the deployment of U.S. forces was still in its first days. Because the allied air forces (reinforced by U.S. Navy and Marine air wings) provided the first offensive capability available to the alliance high command, an offensive air campaign was planned almost at once and largely independent of consideration of any specific ground operations that might follow. Much of this planning was done by the U.S. Air Force staff in Washington and then adapted by CENTAF.8 The theater campaign plan ultimately grafted a ground operation plan onto the existing air plan because the latter continued to be an appropriate-indeed necessary-way to proceed with the employment of available coalition air power. Targeting in the Kuwaiti Theater of Operations (KTO), to be sure, would be affected at some point by the details of the ground operation, but the air component's "major muscle movements" remained constant.

According to his memoir, Schwarzkopf came under pressure from Washington to develop a concept for a ground offensive to free Kuwait almost upon initiation of the Desert Shield defensive deployment. 9 He

resisted the pressure because he was convinced that the force he had just begun to deploy was both inadequate to the task and configured only for defense. The pressure continued intermittently, though Schwarzkopf seems to have done nothing substantive until he relocated to the theater of operations in late August.

To develop a ground offensive plan, the CINC requested and was assigned four recent graduates of the Army's bastion of the operational art, the School of Advanced Military Studies (SAMS), located in the Command and General Staff College, Fort Leavenworth, Kansas. The officers were reassigned from joint posts and other duties in Army units not yet alerted for movement to the Gulf. They were Lieutenant Colonel (later colonel) Joe Purvis, at the time assigned to the U.S. Pacific Command staff in Hawaii; Major Greg Eckert, G3 training, 4th Infantry Division, at Fort Carson, Colorado; Major Dan Roh, executive officer, 708th Main Support Battalion, 8th Infantry Division, in Germany; and Major Bill Pennypacker, executive officer, 1st Brigade, 1st Infantry Division, at Fort Riley, Kansas.

However these officers were chosen, fortune favored Schwarzkopf in the choice of team chief. Purvis was an officer of medium height, slender, and quiet in demeanor, but he concealed in his taciturn nature a highly disciplined and most perceptive intellect not easily swayed by bluster and bravado. When he said something was so, you could bank on it, for the simple reason that Purvis would not say he knew until he was sure he did. He also had a wry sense of humor and the ability to laugh at his own discomfort, no small talent in the high-pressure world he entered in September 1990.

These officers formed a small planning cell for consideration of ground operations. They would be at the center of planning for Operation Desert Storm. The life of this group was instructive about how Central Command and Third Army worked together, how Schwarzkopf exercised his command, and about the role played by General Yeosock and ARCENT in achieving U.S. and coalition goals in Southwest Asia.

Planning was evolutionary. 10 While the Third Army staff focused on deploying its forces and developing the defensive plans for Operation Desert Shield, Purvis and his planners began to explore the possibility of a U.S. ground offensive by examining what could be done with forces available in the fall of 1990. Planning soon expanded to look at options that would be feasible only with the addition of more U.S. forces, forces that were allocated in November. All of this went on while the XVIII Airborne Corps was still arriving and during a period

when there was no commitment to remove Saddam Hussein from Kuwait by force of arms—when, in fact, decisions were being made that were contrary to the needs of a major operational offensive.

Responsibility for planning, although limited at first to a small group at theater headquarters, eventually involved both Yeosock and his G3, General Arnold. Once Schwarzkopf was satisfied he knew what he wanted his components to do, planning for Army operations was transferred to the Third Army staff and transformed over several weeks into a process of simultaneous and iterative dialogue between commanders and staffs from division to theater, with each command echelon having a part in the process in accordance with its immediate and legitimate interests. These officers were assisted in their adaptation to the new requirements by the knowledge they had acquired exploring various counterattack options.

ARCENT offensive planning continued until 8 January, when Schwarzkopf approved the ground operational plan in its essentials. Incremental adjustments were made up to the eve of the attack. The principal linkage between Third Army's planning and Schwarzkopf's work at Central Command was the CENTCOM planning cell itself. Once Schwarzkopf's concept was formulated, Purvis and his team continued to work in the Central Command headquarters in the basement of the Saudi Ministry of Defense Building. However, they were placed under the supervision of Yeosock and Arnold, who were given responsibility for further development of a theater ground attack plan. The Central Command operational concept was gradually worked into a more detailed, all-component and coalition ground offensive plan. Eventually, as planning spread outward to encompass all participating units, the Purvis Group planners resumed duties as a cell within the theater staff dealing with all components alike.<sup>11</sup>

Ground operational planning involved a process of iterative negotiation from bottom to top. This established a single concept in the minds of all commanders, an essential element of successful synchronization of their disparate activities. However, it is now clear that certain divergences of view and philosophy also began to appear, particularly about Iraqi abilities to absorb the Air Force preparation fires. Though little remarked at the time, these divergences would lead to painful misunderstandings during and after the offensive.

The "gang of four," as the Purvis Group became known, reported to Headquarters, Central Command, in Riyadh on 16 September 1990.<sup>12</sup> On the 18th, Schwarzkopf charged them to plan an offensive ground campaign using the forces available in theater at the time—

one corps of two heavy, one light (airborne), and one medium (air assault) divisions; an armored cavalry regiment; a combat aviation brigade; a Marine amphibious force of one division; and the various coalition forces then arriving. <sup>13</sup> The CINC's initial comments made clear that he was looking for an indirect approach, not a frontal attack into enemy strength.

At the outset, only ten or so CENTCOM personnel were to have knowledge of the Purvis Group's activities and plans. For the group, that meant that getting information was often difficult, as it was not possible to tell the source exactly why a piece of information was required. In this, the network of SAMS graduates assigned throughout the theater proved most useful. Many occupied key operational and planning positions at all levels of Army command. These officers knew each other and were willing to study questions and respond to their caller without spending a great deal of time asking why he needed to know. Within Central Command headquarters, on the other hand, inquiries often required a great deal of creativity to make the request plausible without giving away the game.

The Purvis Group was enlarged by the addition of a naval rating, Petty Officer First Class (IS1) Michael Archer, who would be the team's intelligence specialist. In early November, Brigadier Tim Sullivan, a British Guards officer, joined as well. From time to time, experts from various agencies were called in as semipermanent members or for consultation. Among these were Major James Mudd from the Central Command Combat Analysis Office and Lieutenant Colonel (later colonel) John Carr from the ARCENT Provisional (later 22d) Support Command. As the concept took form, the Commander, MARCENT, whose headquarters was not located in Riyadh (as were Headquarters, ARCENT and CENTAF), was kept informed through briefings to his liaison officer to CENTCOM.

The planning group developed and refined various concepts in light of the CINC's guidance, briefed the CINC periodically, received new guidance based on whatever the commander's current concerns happened to be, then went back to the drawing board for another iteration. In a real sense, the group served as Schwarzkopf's alter ego as he clarified his own thinking. Their product was a broad, general outline that would have to be filled in, in ever greater detail, by the components and their major commands. The process, best characterized as a series of "negotiations," was more important than the written products, for it was the process that ultimately produced not just direction but the detailed understanding at every level of how the battle would be fought. The written orders, like interstate treaties,

simply provided a reference to the resolution of issues already decided. There certainly were flaws in the understanding achieved, but these had to do with style, not substance.

By 25 September, Purvis and his group had developed a set of operational considerations for review by the CENTCOM J5, Rear Admiral Grant A. Sharp. 15 First for consideration was the principle that CENTCOM forces should seek to fight only a minimum number of the enemy's formations; they would bypass others. The second and perhaps key assumption was that the air offensive would have to reduce enemy forces about 50 percent in aggregate if acceptable friendly-to-enemy force ratios were to be realized prior to beginning any ground attack. This assumption, which quickly became an article of faith at all levels of the Desert Shield-Desert Storm command, made the acceptability of ground offensive operations explicitly dependent on the success of air operations in the Kuwait theater of operations. Third, with mechanized trafficability in the theater being what it was, it was apparent that rapid intelligence acquisition, reporting, and targeting would be essential to success.

Finally, the whole issue of sustainability became an early and long-lived concern. <sup>16</sup> Operational reach of mechanized ground forces is bought by wheeled vehicles. The Army, which had been designed for defensive war in Europe, was short of wheeled vehicles in general and heavy equipment transporters (HETs) in particular. It was also short of line-haul fuel trucks, especially fuel trucks capable of long-distance off-road movement. HETs provide the ability to concentrate armored forces operationally without undue wear and tear on tracks and power trains. Fuel trucks make it possible to keep the armored columns moving forward in the attack. These shortages of wheeled vehicles had been aggravated by decisions having to do with achieving minimum essential forces for the Desert Shield deployment. A great deal would depend upon the ability of the host nation and allied nations to make up the deficit in all categories.

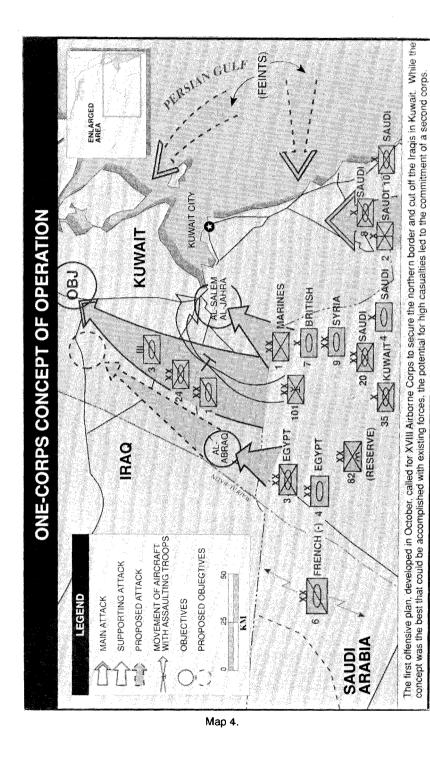
In addition to stated U.S. national goals, Central Command planners assumed as implied objectives the destruction of an Iraqi offensive capability and a consequent restoration of a regional balance of military power.<sup>17</sup> They assumed that the allied coalition would support a combined offensive to free Kuwait, that Iraq would use chemical weapons in its defense, and that alliance forces would not employ nuclear weapons. It was assumed that any offensive operation must ensure, in its movements, the continued security of ports and critical oil facilities. Obviously, any plan should minimize friendly casualties and collateral damage to civilian populations. The primary

risks recognized at the outset were the dependence of any attack on extended lines of communication over unimproved roads, the possibility of terrorist attacks in the coalition's rear areas, and the difficulty of judging with any accuracy residual Iraqi capabilities as enemy forces came under sustained air attack. The theater planning mission was simply stated: "On order, friendly forces conduct offensive operations to eject Iraqi forces from Kuwait; be prepared to secure and defend Kuwait." 18

By mid-September, intelligence analysts knew the Iraqis in Kuwait were laying out a multiechelon, deliberate defense in depth. <sup>19</sup> Regular Iraqi infantry and growing numbers of conscript units occupied fixed positions facing south and east (to sea) in increasingly better-prepared defensive belts. Mobile tactical and operational reserves and regular army mechanized forces were positioned to react to any allied penetration. The Republican Guard Forces Command, pulled back from Kuwait to southeastern Iraq, constituted a theater reserve to conduct the decisive counterattack once the coalition forces were tied down in the forward defenses.

It became clear from their open western flank that the Iragis believed their defensive array was secured by the empty, featureless Iraqi desert beyond the Wadi al Batin. Aside from some token forces securing the few roads in that area, Saddam continued to pour his defensive forces into Kuwait, trying to build a defensive "nut" too tough to crack. The Iraqi leader failed to consider several things that would negate his assumptions: the cumulative effect on his soldiers of a coordinated air campaign by the world's leading air power; the aggregate technological advantages enjoyed by his enemy, not to mention the skill of the men and women employing them; the specific navigational capability that inexpensive global positioning systems (devices for which civilian analogs exist in any Radio Shack store) might give allied ground forces; the immediate and hostile response of the Arab world to his initial incursion into Kuwait: and the determination of President George Herbert Walker Bush to have him out of that country.

The planning cell briefed their recommended courses of action to Schwarzkopf and selected members of his primary staff on 6 October. In response, Schwarzkopf directed the development of a concept of operations that would place the coalition main ground attack west of the elbow or panhandle of Kuwait, penetrate the Iraqi defenses, exploit to seize an objective cutting the north-south line of communication (the Basrah-Kuwait City highway) sixty kilometers north of Kuwait City, and, on order, continue the attack to seize the



Source: Brigadier General Robert Scales et al., Certain Victory: The US Army in the Gulf War (Washington, D.C.: Office of the Chief of Staff, 1993).

Rawdatayn oil fields and secure the northern Iraqi-Kuwaiti border (see map 4). It was Schwarzkopf's judgment that, although such an attack risked failure in light of the unfavorable force ratios, the force itself would not be at risk of catastrophic loss.<sup>20</sup>

This plan and the air offensive plan were taken to Washington on 9 October by Major General Robert B. Johnston, the CENTCOM chief of staff, Brigadier General Buster C. Glossen, a CENTAF planner, Lieutenant Colonel Joe Purvis, and Major Richard F. Francona from the CENTCOM intelligence staff (J2). The plan was presented to the Joint Staff and then, on the 11th, to the president and his advisers. <sup>21</sup> Concerns were expressed that the ground offensive plan attacked into the enemy strength and that barrier-breaching operations would be extremely difficult. Schwarzkopf's view was that, while this might be true, the command lacked sufficient forces and logistics support, particularly cross-country tankers, to attack farther west, avoiding enemy strength entirely.

Schwarzkopf told David Frost in March 1991 that he had told the president the Saturday after Iraq's invasion of Kuwait that, if the national policy were to escalate to require a ground offensive to remove Iraqi forces from Kuwait, he (Schwarzkopf) would require a force larger than that allocated for Desert Shield.<sup>22</sup> At an October briefing, he had General Johnston state that the plan for the one-corps offensive was submitted under some duress; indeed, the briefing itself was followed by the disclaimer: "That is not what the Commander in Chief of Central Command is recommending. It is a weak plan and it is not the plan that we are recommending. . . . if we are serious about ejecting them [Iraq] from Kuwait what we need is more forces to be able to execute a proper campaign."<sup>23</sup>

Colonel Purvis, who was present in Washington during the October discussions, made some important observations about these exchanges. He believed the real value of the meetings was that they established a dialogue between the nation's civilian political leaders, the Joint Staff, and the theater commander. Whatever disagreement existed was, in his view, by no means arbitrary. The president's civilian advisers apparently believed Schwarzkopf had not considered adequately an "Inchon-like" envelopment. Central Command did not agree, and the dialogue continued.<sup>24</sup>

Following the Washington briefing, Schwarzkopf, who had remained in Riyadh, directed that the planning group examine some new questions. What could he do with a new corps? What should it look like? When would it be available? Still, the group's focus remained on

the one-corps option. The J2 was asked to identify Iraqi logistical vulnerabilities that the allied forces might exploit. The real chore, however, was to try and project a future threat, since Saddam had already begun what was to be a long-term process of reinforcement of the occupation forces in Kuwait, an action that proved to be his undoing.<sup>25</sup>

On 17 October, the United Kingdom's theater commander and General Yeosock were brought into the planning process in two separate briefings. Sir Peter de la Billiere, the British commander in chief, had arrived in Saudi Arabia on 6 October. Like Yeosock, Sir Peter had a long association with desert operations, in his case with the British Special Air Services, the famous SAS. At this time, the British land commitment was a single armored brigade, the 7th. This was increased to a balanced two-brigade division shortly after the United States announced its commitment of a second heavy corps in November.

During the briefings they received, Yeosock and de la Billiere raised a number of issues. Among these were questions of allied capabilities and the willingness to participate in an offensive, the need to keep forces concentrated in the face of unfavorable force ratios, the trafficability of terrain north of the Saudi border, the desirability of a deception plan, the difficulty of staging adequate logistic support in a timely fashion given the distances involved and the lack of good supply routes, and the need to keep the east covered adequately while forces were concentrated for an attack in the west.<sup>26</sup>

Yeosock also received a briefing from the Third Army's Support Command concerning sustainment issues associated with a one-corps offensive plan. The plan at issue provided for the movement of the XVIII Airborne Corps' heavy forces (3 ACR, 24th Infantry Division. 1st Cavalry) to the Saudi border area with western Kuwait, east of Hafar al Batin. Support Command's planners calculated that it would take nine to thirteen days to complete the movement at night. The principal constraint was the number of trucks available. The briefing noted that by 25 November there would be no more than 112 U.S. military HETs in theater (on 10 October there were none) and that it would take up to nineteen days, using all military and known hostnation capabilities, to move the one-corps force to attack east of Wadi al Batin.<sup>27</sup> Prestockage of forward logistic bases would take from three to sixteen days depending on when the execution date came and whether or not both day and night movement could be used.28 It was quite evident that, for any offensive concentration inland, the force would have to use a combination of commercial, host-nation, and military HETs. Consequently, the acquisition and allocation of HETs would be the Third Army commander's biggest concern in December and January.

On the 18th, Admiral Sharp was briefed on three courses of action for a two (U.S.) corps attack. The favored alternative called for two corps to attack abreast west of the Kuwaiti border, with a follow-on mission to destroy the Republican Guard Forces Command. Later that same day, the group briefed Brigadier General James Monroe, the Third Army G4. Monroe was perceived to be very receptive and helpful, which was important, as he would play a key role in the sustainment of any operation. At this time, logistic prepositioning and unit repositioning to forward assembly areas were the major conundrums involved in any two-corps plan.

Schwarzkopf was briefed on 21 October. He approved the idea of a ground offensive plan with a main effort consisting of two U.S. Army corps attacking west of the Kuwaiti border to get behind the principal Iraqi forces. He personally set the operational objective of the attack as the *physical* destruction of the Republican Guard, which he recognized as a strategic center of gravity in the KTO.<sup>29</sup> Pointing to a map, he said,

With these two corps there [pointing at the US corps]...
I've got forces here [pointing into Kuwait].
I sit on Highway 8.
I've defeated him in his mind.
I've threatened his Republican Guard;
Now, I'll destroy it.30

Schwarzkopf identified as issues outstanding the question of trafficability and supportability (Yeosock estimated that the concept was supportable), the proper role for coalition forces given their varied capabilities and the absolute political as well as military necessity for their active participation, and the need to find a proper role for MARCENT in light of the corps' short logistic legs, sea-based close air support, and proximity to forces afloat.<sup>31</sup>

The following two days, the Central Command staff in Riyadh briefed the chairman of the Joint Chiefs of Staff on both the one- and two-corps options, with emphasis on the possibilities of the former. Powell apparently believed that a one-corps offensive could succeed. It took two and one-half hours on Friday, 22 October, and two more on Saturday, to convince him that a one-corps attack was a gamble, not just a risk. The chairman's guidance to Schwarzkopf was straightforward and entirely supportive: "Tell me what you need for

assets. We will not do this halfway. The United States military is available to support this operation."32

The conclusion was that a second U.S. Army corps (at that time, two divisions and an armored cavalry regiment; later, a third division was added at the request of the Third Army commander) would provide the necessary forces to permit maneuver to the west, around the Iraqi main deployments. Air Force resources would increase proportionally, as would deployed naval forces. Obviously, Third Army would have to build a substantial theater and host-nation logistic support structure simultaneously with arrival of the new corps if there were to be sufficient means to project the offensive force the distances required to bring it into contact with the Republican Guard troops and to sustain it in battle once joined. Most of the theater logistic forces would have to be drawn from the Reserve Components.

Through the vicissitudes of international politics, Southwest Asia, heretofore a secondary theater where the rule had always been one of economy of force, was now within days of becoming the main effort for the United States' armed forces. The chairman took the two-corps graphics back to Washington with him.<sup>33</sup>

On 24 October, the planning cell was placed under operational control of the Third Army commander to develop further the concepts for ground operations. The group continued to be located at Central Command to maintain its security. Yeosock and Arnold would work to flesh out the theater ground offensive plan and, at the same time, begin preparing for the main ground effort within that plan.

For the time being, however, focus remained on one-corps options, the principal case at this time, with a U.S. Army corps west of the Kuwait border (considered to be possible, if risky, with the then-current threat), the MARCENT and United Kingdom (U.K.) brigade just inside the border protecting the XVIII Corps' eastern flank, and the Egyptian and Syrian corps farther to the east by the "elbow" of Kuwait. Amphibious operations were planned only as demonstrations and feints. No Inchons seemed likely.<sup>34</sup>

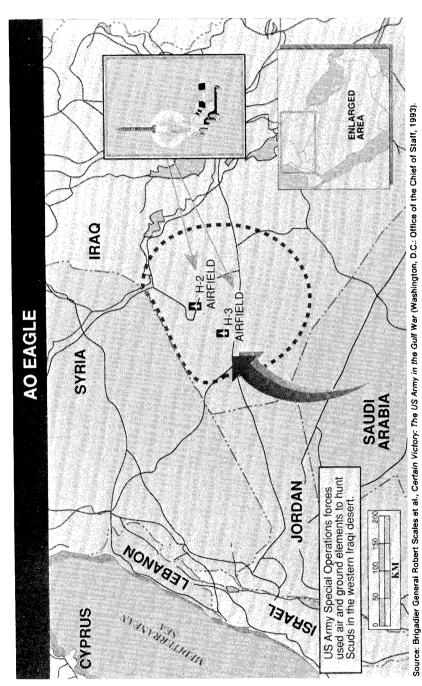
Colonel Purvis observed that, the one-corps focus notwithstanding, his group believed the two-corps option would be selected because of the chairman's reaction. Schwarzkopf, however, was not yet ready to allow them to brief the two-corps option to the components. ARCENT and the Department of the Army were still discussing rotation policies for forces already in theater. But confirmation of the Purvis Group's hunch was not hard to find. On 25 October, immediately following the chairman's return to the United

States, the secretary of defense appeared on the morning news programs of all four major TV networks and announced a pending increase of U.S. ground forces. He hinted broadly that the number could reach 100,000 and involve units from Europe.<sup>35</sup>

As planners anticipated approval of the two-corps option, a question was raised on 27 October about U.S. attacks on airfields and surrounding SCUD sites located in western Iraq within missile range of Israel. Concern about Iraq's ability to disrupt the U.S.-Arab coalition by prompting an Israeli intervention had begun to grow in Washington. In response, ARCENT set up another special planning group staffed with representatives of the ARCENT and XVIII Airborne Corps. Its members were Lieutenant Colonel Bob Butto, from the 513th Military Intelligence Brigade; Lieutenant Colonels Bob Westholm and Matt Kriwanek, from the commanding general's personal staff; Major Bob Dement, ARCENT's G4 plans; and Lieutenant Colonel Dave Huntoon and Major Teri Peck from XVIII Airborne Corps' G3. Major Matt Smith, the 1st Cavalry Division liaison officer to ARCENT, rounded out the group and looked out for the interests of III Corps' headquarters should it be deployed.<sup>36</sup>

The ARCENT and corps planners evaluated options for attacking these targets, particularly the airfields, called H2 and H3, but saw such efforts by conventional ground forces as both a significant logistical risk and an unproductive diversion of forces from the main effort.<sup>37</sup> Further inquiries elicited the same response. Ultimately, special operations forces from the United States and Special Air Service forces from the United Kingdom were committed to the SCUD hunt in western Iraq (see map 5). SCUD hunting also caused a significant diversion of air support during the conduct of air operations after 16 January.

On 6 November, two days prior to the president's announcement of further deployments, Secretary of State James Baker and King Fahd agreed to an allied command plan that essentially blessed the existing structure of dual command, with Saudi preeminence in decisions involving defense of the kingdom itself and American freedom of action for U.S. forces for contingencies beyond the Saudi borders, with the caveat that offensive action would require advance agreement by both heads of state. Baker was quoted as saying that "'a new phase' had begun in the Persian Gulf crisis in which the global community is prepared to 'resort to force' if a peaceful solution is not found." By the end of the month, there would be agreement in the United Nations Security Council to just that. The agreement on



Map 5.

coalition command, it was reported, did not bind other nations, who would be brought in by separate bilateral agreements.

For a time, the focus of the planning process remained in the Ministry of Defense basement. Lieutenant Colonels Westholm and Kriwanek acted as Third Army points of contact as required, as did Lieutenant Colonel Huntoon and Major Peck at XVIII Airborne Corps. The ad hoc solution at Third Army was called for, not only because of security considerations, but because, as previously noted, the regular Third Army planners had been used to set up the C3IC organization in August. They simply were not readily available, and presumably there would have been concern about possible compromise of the plan to the Saudis before the proper diplomatic preparation had been accomplished.

Planning continued on the one- and two-corps options and the H2-H3 airfield excursion. Schwarzkopf was briefed on H2-H3. He objected to the operation as being too risky because of the distance the airfield attack force would be from any sustaining base and the main effort. His guidance was to focus planning on the two-corps concept. On 31 October, forces available for planning included five U.S. heavy divisions, two armored cavalry regiments, the airborne and air assault divisions, six field artillery brigades, two aviation brigades, the French light armored division(-), a British armored division(-), four Saudi heavy brigades, a Kuwaiti heavy brigade, two Egyptian heavy divisions, a Syrian heavy division(-), two U.S. Marine divisions, and two Marine expeditionary brigades. Objectives as far west as Samawah on the Euphrates were considered for a secondary attack. Although Baghdad was mentioned, the conclusion was that it was too far away to hold even if it could be captured and, more to the point, that its capture would exceed the UN charter for coalition forces, which limited their objective to the liberation of Kuwait.39

On 1 November, a number of sustainment issues were raised by a representative from 22d Support Command, Colonel John B. Trier. Trier followed the earlier work done by Colonel Carr and became the point of linkage with the support command for development of the sustainment concept for Desert Storm. Concerns identified in November generally involved the burden of introducing a new corps package. Given the existing strains already accepted in the theater logistics structure and recognizing that the overriding need for haste that had governed the August deployment no longer obtained, the new corps' logistic elements would have to precede tactical units to provide necessary life support and transport. Because the ports lacked the infrastructure to support linkup and marshaling, incoming forces

would have to pass through the ports rapidly and transition to the assembly areas to "stand up." 40

A recommendation was made that the area around King Khalid Military City (KKMC), southwest of Hafar al Batin, serve as the logistics center for the concentration of the incoming corps. In December and January, VII Corps would concentrate in the desert, east and south of KKMC and west of XVIII Airborne Corps. This would require that the new corps pass through the area defended by XVIII Airborne Corps. Subsequently, this would also require XVIII Airborne Corps to pass in front of VII Corps for deployment for the attack. Though this sounds inconvenient, it allowed XVIII Airborne Corps to continue to perform its Desert Shield defensive mission while VII Corps deployed and formed in the desert. It became a major part of the deception operation for Operation Desert Storm. Third Army established KKMC as a major forward operating and logistics base, the pivot for the redeployment to attack positions west of Wadi al Batin that began on 17 January.

The planners were beginning to deal with the fact that the existing and anticipated operational areas between KKMC and the port of Ad Dammam were limited to a road net consisting of an irregular polygon of roads, mostly two lanes wide, often unimproved and full of Saudi civil traffic in ubiquitous white Toyota pickups. If one went on out to Rafha (as ARCENT would), that added another 168 miles of adequate-to-bad two-lane road. This created an extraordinary transportation problem, compounding the general shortage of HETs and line-haul trucks. The distances involved far exceeded those of the famous Red Ball Express of World War II.

On 2 November, the planners briefed Yeosock on their two-corps concept: an attack west of Wadi al Batin by a notional heavy corps that would drive north to the Euphrates, turn the Iraqi defenses, and destroy the Republican Guard in the area of Iraq just north and west of the Kuwaiti border. At that time, it was envisioned that the Marines would attack and penetrate defenses just inside the Kuwaiti border. Two Royal Saudi Land Force brigades would attack on the Marines' left, up the Wadi some limited distance. The XVIII Corps would follow the Marines in sector, pass through and conduct a supporting attack eastward across northern Kuwait. The bulk of the Arab Islamic forces would attack and penetrate into Kuwait from the south. A variant showed XVIII Corps attacking toward An Nasiriyah to the northwest, while the notional heavy corps advanced on an axis of advance approximating the Kuwaiti border, northeast then east.

On 6 November, Schwarzkopf was briefed along with his principal staff and, finally, his component commanders. Schwarzkopf emphasized the need for a deception plan to avoid giving away the scheme of maneuver. The deception was intended to portray the threat of attack only through the Kuwaiti southern border area, with no intent to enter via Iraqi territory. No U.S. force or logistic prepositioning was to be allowed west of Wadi al Batin prior to the start of the air offensive. That, it was hoped, would blind the Iraqi defenders. American units, which would make the main attack, were to be kept behind Arab-Islamic forces and off the border until just before the attack itself.<sup>42</sup>

The deception plan had several implications. It meant that the massive logistic preparations for an offensive would have to take place simultaneously with the operational repositioning of maneuver forces, both using a very limited road net and a limited number of wheeled vehicles. It meant, as well, that intelligence collection and, consequently, air preparation of the battlefield would have to be from the top down, from theater and army level to corps and division, because of the resulting blindness of attacking tactical units. Tactical commanders and some ARCENT staff members found these considerations to be increasingly discomforting. The deception plan also meant that air preparations of the KTO would have to be conducted in such a way that those targets most important to Army commanders in the main attack would be attacked last, a consequence that tried the patience of all.

Schwarzkopf found the concept as briefed too detailed and indicated component commanders should be given greater flexibility in development of their own concepts. In fact, he also seems to have warned the component commanders to allow their subordinates to do their business without overcentralization at component level.<sup>43</sup>

Schwarzkopf directed the Marines to be employed in the east, both for reasons of logistic sustainment and in order to maintain the cover story of an attack through Kuwait. (As late as 20 February, Iraq continued to push forces into the "heel" of Kuwait, no doubt in part due to the highly visible Marine Corps presence ashore and afloat.) Schwarzkopf also set out his priorities for the air attack in support of ground operations, the disruption of command and control facilities and the logistics supporting the KTO, and the attrition of the Republican Guard. The operational goal remained the cutting off and destruction of the Republican Guard.<sup>44</sup> Finally, the theater commander identified three major issues for resolution: the shape of the new U.S. Army forces and the time needed to get them in position

ready for use, the logistical supportability of the concept, and the matter of trafficability. Regarding the last issue, XVIII Corps was to do a good deal of desert driving on terrain similar to that in southeastern Iraq in order to develop some empirical data.

On 8 November, President Bush announced the deployment of the European-based VII Corps to Central Command in order to establish an offensive option for the resolution of the Kuwait crisis. 45 Talk of troop rotation plans were set aside and preparation for a possible offensive were taken in hand. Component plans continued to be fleshed out and back-briefed to Schwarzkopf until he was comfortable with them. The secretary of defense and chairman would make two trips to the theater, in December and in February, before they would be convinced that the details were sufficiently in hand for them to recommend to the president a date for the ground attack. Meanwhile, there was now a theater concept within which the components could begin their own considerable hard work.

On 14 November, Schwarzkopf held what was probably his most important briefing of the war from the standpoint of transmitting the commander's intent: he briefed his ground commanders, division level and above, in Dhahran. The commanders from deploying units were brought to Saudi Arabia from their U.S. and European bases for the meeting. Schwarzkopf laid down the primary objective: "to destroy the Republican Guard."46 He also enjoined absolute security concerning the scheme of maneuver and indicated he expected the Iraqis to employ chemical weapons, though he seems to have drawn no particular operational conclusion from that fact. The one discordant note Schwarzkopf would later record was an observation by Lieutenant General Fred Franks, the commander of the VII Corps, Schwarzkopf's major maneuver force, that he would need additional forces, specifically the 1st Cavalry Division, to carry out his assignment.<sup>47</sup> In retrospect, this seems to have been the first of a series of events that would lead to various postwar recriminations. At the time, it did not seem a major issue.

Major General Tom Rhame, the commander of the 1st Infantry Division (Mechanized) from Fort Riley, Kansas, emphasized the importance of this briefing in an interview later televised by one of the cable TV networks. As Rhame pointed particularly to the CINC's clear articulation of the task at hand, "to destroy the Republican Guard," as a mission that even privates could understand and upon which they could concentrate their efforts. This briefing and subsequent conferences and briefings ensured an extraordinary degree of unity of effort in the U.S. offensive. The selection and clear articulation of the

command's military objective may well have been Schwarzkopf's greatest contribution as theater commander, for it produced a harmony of action rare in complex operations. The harmony was, in part, enforced, as in the period following the briefing, the CINC would make it quite clear, sometimes with implicit threats, that tactical (corps and division) commanders would do well not to spend time second guessing his offensive concept, 49 a message that would prove to be counterproductive in the long run. Nonetheless, from the 14 November briefing onward, planning for the offensive proceeded at all levels with continuous discussion and negotiation.

Third Army and coalition planning continued for a while to be concentrated in the Purvis Group, working under Yeosock's guidance. After the commander's conference, there was additional guidance from Schwarzkopf that had to be accommodated.<sup>50</sup> The CINC demanded a heavy division as theater reserve. For obvious reasons, the division would have to come from ARCENT. The 1st Cavalry Division, less the "Tiger Brigade" (1st Brigade, 2d Armored Division), would ultimately fill this role. The XVIII Corps would be committed in the west in the area from As Salman to As Samawah. The U.K. forces, which were to be increased to a division, were to remain with the U.S. Marines. (Ultimately the British forces were reassigned to ARCENT in exchange for the "Tiger Brigade.")

The time from 15 to 23 November was a period of adjustment and revision. Schwarzkopf wanted a placement of coalition forces that would best utilize the different capabilities represented and that would take into account regional animosities and suspicions. Concern remained about the off-road trafficability of the area in which XVIII Corps would operate and about casualties at the breach site. These concerns would remain active to the point of execution.

On 23 November, Schwarzkopf was briefed again. He gave qualified approval to Third Army's draft plan, which was issued to the Army major subordinate commanders the following day.<sup>51</sup> The plan called for a four-stage operation: logistical build-up, prepositioning, ground offensive, and consolidation. It set a stockage level for forward bases of five days of supply in class III (fuel) and class V (ammunition), plus the necessary stocks to support the forces in their tactical assembly areas. The entire ground operation was expected to take up to eight weeks.

The plan called for VII Corps to be in a defensive position west of XVIII Corps no later than twenty-five days prior to the ground attack. Northern Area Command would pull its forces east of Wadi al Batin,

and the French 6th Light Armored Division, which drew its support from the Red Sea, would screen the area west of the wadi. Redeployment of the two corps to their preattack tactical assembly areas was expected to take two weeks. The XVIII Corps was to be on the left, VII Corps on the right, both west of Hafar al Batin. Repositioning was to take place in conjunction with the initiation of air operations. The destruction of the Iraqi Air Force, together with any ground sensors likely to detect allied movement in time for the Iraqis to react, was essential if the ground attack was to achieve surprise and the ability to concentrate.

The ground attack itself was expected to take up to two weeks. The plan assumed that coalition fixing attacks would go in at daylight on D-day (later G-day to differentiate ground from theater [air] attack), with the main attack following twelve hours later (H+12), to "maneuver deep West of Kuwait to destroy the RGFC and cut off LOCs to Iraqi forces in the KTO."52 For reasons that will be addressed later, this delay ultimately grew to twenty-four hours. The initial offensive was to be followed by a consolidation phase anticipated to last up to four more weeks during which Iraqi forces remaining in Kuwait would be defeated.

The four major coalition commands from east to west would be. starting on the right, the Eastern Area Command (Joint Forces Command East), which was to attack north along the Kuwaiti coast to deceive the enemy and fix his reserves, and MARCENT. MARCENT, then including the U.K. armored division, was to attack near the elbow of Kuwait to penetrate forward Iraqi defenses, fix tactical reserves south of the As Salem airfield, occupy a blocking position. link up with the Northern Area Command on the left, then, in conjunction with the Northern Area Command, isolate Kuwait City and conduct consolidation operations. In the center, the Northern Area Command (later Joint Forces Command North) containing the Egyptian and Syrian combat units, as well as Royal Saudi Land Forces and a SANG brigade, was to penetrate the enemy defenses, drive to the north of the As Salem airfield, join with Third Army, and occupy a blocking position north of Kuwait City on the north-south Kuwait City-Basrah highway. The two Arab-Islamic commands would liberate Kuwait City.

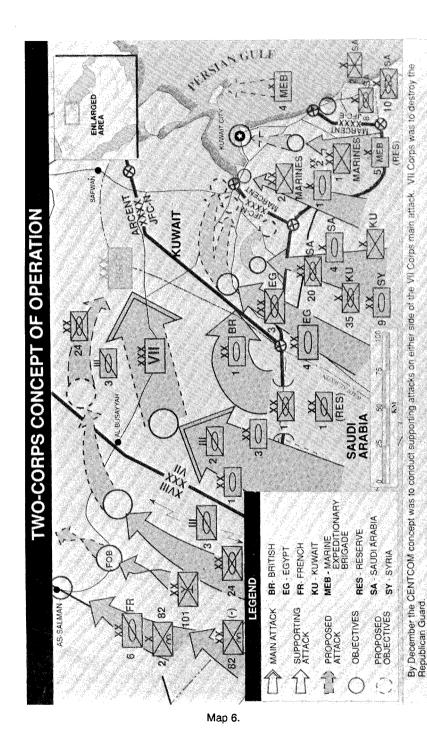
The VII Corps was to conduct the Third Army's main attack. It was to penetrate the enemy's forward defenses and attack in zone to defeat the Republican Guard. On the left of the ARCENT sector, the XVIII Corps would conduct a supporting attack to block the Highway 8 valley. The corps would be prepared to continue the attack to the east

down the valley in order to assist VII Corps in destruction of the Republican Guard. Both corps would prepare plans for consolidation and occupation of sectors in western and northern Kuwait.

Schwarzkopf approved this outline for planning. He charged Yeosock to guarantee supportability of the concept or to modify it.<sup>53</sup> On 24 November, the Third Army commander briefed his subordinate commanders. On the 28th, there was a logistics conference at Dhahran to work out a concept of support. The next day, the regular ARCENT planning staff was brought into the process, and planning at Third Army gradually flowed back into normal component channels. The special planning group reverted to CENTCOM control on 18 December. The C3IC passed to Central Command at about the same time. This released the ARCENT planners back to the Third Army's G3. Major General Schwartz, who would have become Yeosock's principal deputy had he returned to Third Army, was retained as chief of the C3IC, working directly for Schwarzkopf.

On 30 November and 7 December, the XVIII Corps and the VII Corps, respectively, gave their initial briefings to the Third Army commander, at times offering significant modifications to the conceptual plan. For example, VII Corps proposed, among other alternatives, either moving the XVIII Corps to VII Corps' eastern flank (very much like the old two-corps option) in order to extend the maneuver area for Schwarzkopf's "Great Wheel," or having XVIII Corps penetrate and VII Corps pass through into the attack. The effect in either case would have been to force the lighter XVIII Corps troops into the breaching operations required ultimately of the 1st Infantry Division, a move neither Yeosock nor Schwarzkopf was likely to contemplate. The corps' passage of lines would have been prohibitively time consuming. In any event, General Rhame had volunteered his 1st Infantry Division to do the breaching operation because of the training it had completed prior to alert for Desert Shield. VII Corps thus remained the inner (U.S.) corps.54

Another point of contention concerned the proper employment of the French 6th Light Armored Division (ultimately placed under Tactical Control of the XVIII Corps on the far left flank) and the 1st U.K. Armored Division. Two different issues were involved. In the case of the French, the issue was political. In its simplest terms, French Minister of Defense Jean-Pierre Chevenement opposed subordination of the French to the U.S. commander. (The defense minister very likely opposed U.S. policy altogether.) This situation changed when Chevenement resigned in December and was replaced by Pierre Joxe. The British commander, General de la Billiere, was for his part



Source: Brigadier General Robert Scales et al., Certain Victory: The US Army in the Gulf War (Washington, D.C.: Office of the Chief of Staft, 1993)

concerned about casualties if the British remained with the Marines in the fixing attack and wanted his force employed in the sort of open maneuver warfare for which it was trained. Schwarzkopf, with some misgivings, acceded to de la Billiere's request and replaced the British two-brigade division with the "Tiger Brigade." By the time Secretary of Defense Cheney was briefed on 20 December, ARCENT had already planned for the employment of the French division with the XVIII Corps on the extreme left and the British with the VII Corps. 55 (See map 6.)

As boundaries changed east or west, it became increasingly evident that there was going to be a significant transportation problem to be solved, one that involved both the general shortage of some types of critical vehicles and the rate at which transportation units could be brought into theater. The influx of transportation units had not only to respond to the needs of the new corps, but it also had to remedy cuts accepted when the force structure guidance had been based upon the concept of "minimum essential forces." 56

The concept paper or draft plan passed by the CENTCOM planning group to the ARCENT G3 planners (and briefed to the commander in chief on 23 November) was neither a normal joint headquarters directive nor a coordinated operations plan, though it was formatted generally as the operations portion of the latter. The details of the actual actions of the two corps on the ground remained to be worked out, although the general parameters had been established and would be retained: the VII Corps would attack on the ARCENT right, west of Wadi al Batin, driving north and east and destroying the Republican Guard Forces Command; the XVIII Corps would conduct a secondary effort designed to distract the Iraqi high command with a putative or apparent threat to Baghdad. Meanwhile, the light corps would attack to As Samawah and, more important, cut the major axis of withdrawal along Highway 8 south of the Euphrates River. Ultimately, the corps could advance southeast along the river to secure the northern fringe of the pocket of southeastern Iraq, which the allied high command wished to hold at the end of the operations, and, simultaneously, assist VII Corps in the destruction of the Republican Guard.57

A Third Army planner, Major Steve Holley, was detailed from the plans section in the C3IC organization and, with Lieutenant Colonel George H. Del Carlo, another Third Army G3 staff member, established an office in a small room on the fifth floor of the Royal Saudi Land Forces headquarters (the location of ARCENT's headquarters in December) to prepare the draft Third Army

operations plan for Desert Storm in conjunction with the Purvis Group in the Ministry of Defense. In mid-December, these two officers were joined by Major Dan Gilbert, a SAMS graduate assigned, like most new staff members, from a unit not identified for deployment to Desert Shield. Gilbert developed the ARCENT MAPEX that provided the formal venue for the major commands and commanders to discuss their concepts and begin hammering out the comprehensive plan for the Desert Storm main attack.

## Notes

- Richard Saltus, "Air Force Says It Might Have Won the War in 2 More Weeks," The Boston Globe, 5 April 1991, 10.
- 2. De la Billiere, Storm Command, 53.
- 3. B. H. Liddell Hart, The Decisive Wars of History (London: G. Bell & Son, Ltd., 1929), 141-58. Reprinted in a number of editions under the title Strategy. Colonel Boyd owes his fame to a briefing given widely but never to the author's knowledge disciplined by being produced in print. The key insight of Colonel Boyd's presentation has to do with "getting inside the enemy's decision cycle." For a summary of Liddell Hart's theories, see Brian Bond, Liddell Hart and the Weight of History (London: Cassell & Co., Ltd., 1977); and Brian Bond, British Military Policy Between the Two World Wars (Oxford: The Clarendon Press, 1980). See also John Mearsheimer, Liddell Hart and the Weight of History (Ithaca, NY: Cornell University Press, 1988). For a discussion of Boyd, see William S. Lind, Maneuver Warfare Handbook (Boulder, CO: Westview Press, 1985), 4-8.
- 4. Jomini maintains that "Employment of the forces should be regulated by two fundamental principles: The first being to obtain by free and rapid movements the advantage of bringing the mass of the troops against fractions of the enemy; the second, to strike in the most decisive direction." Baron de Jomini, The Art of War, trans. Captain G. H. Mendeil and Lieutenant W. P. Craighill (Philadelphia, PA: J. B. Lippincott & Co., 1862; Greenwood Press Reprint, n.d.), 299. Fuller says: "Grant's object was consistent; strategically it was to threaten his enemy's base of operations, and tactically to strike at the rear, or, failing the rear, at a flank of his enemy's army. This being so, the pivotal idea in his generalship was absolutely sound, and firmly based on economy of force." Major General J. F. C. Fuller, The Generalship of Ulysses S. Grant (Millwood, NY: Kraus Reprint, 1977), 194. For Fuller's thought, see Anthony John Trythall, "Boney" Fuller: The Intellectual General (London: Cassell & Co., Ltd., 1977); and Brian Holden Reid, J. F. C. Fuller: Military Thinker (New York: St. Martin's Press, 1987).
- 5. Department of the Army, Field Manual 100-5, Operations (May 1986), 14.
- Schwarzkopf, Doesn't Take a Hero, 386–87. Note refers to draft strategic guidance Schwarzkopf submitted to JCS as evidence of how he analyzed his strategic mission.
- HQ, U.S. Central Command, Riyadh, Saudi Arabia, USCINCCENT OPLAN Desert Storm, dated 16 December 1990, 13.
- 8. Schwarzkopf, Doesn't Take a Hero, 313, 318-21. The most comprehensive account of the air campaign planning available for the public at this time is in Department of Defense, Office of the Secretary of Defense, "Conduct of the Persian Gulf War: Final Report to Congress Pursuant to Title V of the Persian Gulf Conflict Supplemental Authorization and Personal Benefits Act of 1991" (Public Law 102-25), chapter 6, 83-92. An account for the general reader is presented by James P. Coyne, "Plan of Attack," Air Force Magazine 75, no. 4 (April 1992): 40-46. HQ, U.S. Central Command, Commander, Memorandum, Subject: Operations Desert Shield/Desert Storm, Exercise Internal Look 90 After-Action Report, dated 11 July 1991, 9.

- 9. Schwarzkopf, Doesn't Take a Hero, 314-15, 320-21, 326-27.
- 10. The primary document for the activities of the Purvis Group (planning) is a log kept by Major Eckert for the group. Unless otherwise noted, this is the source for the narrative of the planning cell actions that follows, hereinafter referred to as Purvis Group Diary.
- 11. Note from Colonel Purvis to author on manuscript draft.
- 12. Purvis Group Diary, 1.
- 13. These were the Desert Shield forces.
- Comment by Colonel Purvis to author. See also interview with Major General Steven Arnold, Eskan Village, 15 March 1991, 15–16.
- 15. Purvis Group Diary, 1.
- 16. Note from Colonel Purvis to author on manuscript draft.
- Briefing received from Colonel Purvis, Purpose: Provide a Briefing on the Development and Execution of Operation Desert Storm, slide titled, "NCA Objectives."
- 18. Ibid., slide titled, "Mission."
- 19. The Threat Summary on the ARCENT Update Briefing for 15 September, under "Major Trends," reads: Iraqi Forces continue to improve their defense in depth. Divisions in forward positions [sic] are deployed with infantry forward. Mech and armored units are deployed to permit rapid reinforcement and counterattack. Iraqi forces retain the capability to conduct offensive operations. HQ, ARCENT, Command Group, ARCENT Update Briefing, dated 15 September 1990, slide titled, "Threat Summary."
- 20. This appears to incorporate the concept Schwarzkopf sketched out for Chairman Powell in Washington in August. Schwarzkopf, Doesn't Take a Hero, 315, 356. Schwarzkopf's judgments are taken from the Purvis Group Diary, 1-2.
- 21. Schwarzkopf, Doesn't Take a Hero, 359-60.
- Transcript of Frost interview dated 22 March 1991, in possession of author, 6.
   Schwarzkopf reiterates the same point in his memoir. Schwarzkopf, Doesn't Take a Hero, 301.
- Transcript of Frost interview dated 22 March 1991, 8. Schwarzkopf, Doesn't Take a Hero, 359-60, reproduces CINC's assessment.
- 24. Notes from Colonel Purvis to author on manuscript draft. Purvis subsequently concluded that had the October briefing contained an indication that a second corps would be used in an envelopment west of Wadi al Batin, it might have assuaged some concerns in Washington, D.C., that Schwarzkopf was committed to a frontal attack.
- Purvis Group Diary, 3. On 9 October 1990, ARCENT's Update Briefing reflected an Iraqi presence in the KTO of twenty-five divisions (thirty-six heavy, 3,700 tanks,

- and forty-three light brigades). On 15 January 1991, the Update Briefing showed forty-five divisions (forty-five heavy, 4,280 tanks, and eighty-three light brigades).
- 26. Ibid., 3-4..
- 27. HQ, ARCENT Support Command (Prov), briefing titled, "CSS Sustainment"; slides titled, "Move the Force HETS (As of 10 October)" and "Move the Force, Number of Days." Briefing dated 17 October on General Yeosock's briefings-slide index. Pagonis, Moving Mountains, 118-25. General Pagonis writes that his planning effort reflected anticipation of future possibilities rather than an effort growing out of Schwarzkopf's planning cell.
- 28. Ibid., slide titled, "Prestockage Time Requirement."
- 29. Purvis Group Diary, 4.
- Quoted by Major Dan Roh in interview of Purvis Group conducted by the author and Major Larry Heystek, commander, 44th Military History Detachment, at Riyadh on 7 March 1991, 33.
- 31. Note from Colonel Purvis to author on manuscript draft.
- Quoted in Purvis Group Diary, 5. Notes from Colonel Purvis to author on manuscript draft. Schwarzkopf's account is in Schwarzkopf, Doesn't Take a Hero, 366-67.
- 33. Note from Colonel Purvis to author on manuscript draft.
- 34. Purvis Group Diary, 5. Note from Colonel Purvis to author on draft.
- 35. R. Jeffrey Smith and Patrick E. Tyler, "U.S. Considers Sending More Forces to Gulf: Goal Is to Maintain 'Credible' Offensive Power, "The Washington Post, 25 October 1990, A1. Patrick E. Tyler and Molly Moore, "U.S. Strength in Gulf May Rise by 100,000: Many Troops Would Be Shifted From Europe, "The Washington Post, 26 October 1990, A1, A32. Michael R. Gordon, "U.S. Decides to Add as Many as 100,000 to Its Gulf Forces; Cheney Statement; No Date for Deployment—Some Troops May Come From Europe," The New York Times, 26 October 1991, A1.
- 36. Lieutenant Colonel Matt Kriwanek provided membership of group to author and a note from Colonel Purvis to the author on the manuscript draft addressed concern that III Corps might rotate in and have to execute the plan. ARCENT had explored the possibility of III Corps replacing the XVIII Corps as early as August.
- 37. Purvis Group Diary, 6; and HQ, ARCENT (CENTCOM Planning Group), briefing titled, "ARCENT Contingency Operations (H2-H3 Brief)," dated 30 October on General Yeosock's briefings-slide index. Schwarzkopf is scathing about the "western excursion," which he sees as unwarranted interference in professional matters by civilian political leaders. Schwarzkopf, Doesn't Take A Hero, 368-69. See also de la Billiere. The Storm Command, 103.
- David Hoffman, "Baker, Fahd Set Command Plan: Accord Helps Prepare for Possible Attack," The Washington Post, 6 November 1990, A1, and A16.
- 39. Purvis Group Diary, 6.

- 40. Ibid.
- 41. Ibid., 7. General Yeosock's briefing files hold a briefing dated 5 November, titled, "2 Corps Option Packet by ARCENT Staff to CG." Either date is possible given CG's schedule but 2d looks more likely since CG went to visit 24th ID during day of 5th. Slides dated 5th may have been prepared after briefing to CG for presentation to the CINC.
- 42. Purvis Group Diary, 7. A complete history of the deception plan was prepared by Major Louis J. Ovnic, the ARCENT G3 planner who took responsibility for ARCENT deception planning. HQ, ARCENT, G3 AFRD-DTP, Memorandum for Record, Subject: Command Report Operation Desert Storm—Deception Operations, dated 14 March 1991.
- Purvis Group Diary, 7. Handwritten notes by General Yeosock of CINC's briefing, copy in possession of author.
- 44. Purvis Group Diary, 7-8. Copy of handwritten notes taken by General Yeosock.
- 45. George Bush, "The Need for an Offensive Military Option," in The Gulf War Reader: History, Documents, Opinions, Michael L. Sifty and Christopher Cerf, eds. (New York: Times Books, 1991), 228-29. Department of Defense, Office of the Assistant Secretary of Defense (Public Affairs), News Briefing, Secretary of Defense Dick Cheney, Chairman of the Joint Chiefs of Staff, General Colin Powell, DOD News Briefing, Thursday, November 8, 1990-4:45 P.M. Ann Devroy, "Bush Orders 200,000 More Troops to Gulf," The Washington Post, 9 November 1990, A1, A32. Michael R. Gordon, "Bush Sends New Units to Gulf to Provide Offensive Option; U.S. Force Could Reach 380,000; Tank Buildup a Key; President Suggests New Troops May Persuade Iraq to Back Down," The New York Times, 9 November 1990, A1 and A12.
- Schwarzkopf, Doesn't Take a Hero, 380-84, describes 14 November briefing from CINC's perspective.
- 47. Ibid., 383.
- 48. Journals of War, a VHS tape produced by Kurtis Productions, Ltd., in Association with Arts & Entertainment Network (1991). Tape in possession of author.
- 49. Both General Peay and General Luck had occasion to be reprimanded by the CINC for presuming to make suggestions concerning operational planning. General Peay told the author of his experience himself. General Luck's experience was related by one of his senior staff officers. In all likelihood, Schwarzkopf was touchy about people getting into his planning business because of all the help he was receiving from Washington.
- 50. Purvis Group Diary, 9-10.
- 51. Ibid., 10. Document titled, "COMUSARCENT Desert Shield Operations Plan 003, Operation to Conduct Offensive Operations Against Iraqi Forces," dated 1200 23 November 1990, enclosure 13 to HQ, ARCENT, G3 (Plans) AFRD-DTP, Memorandum thru Colonel Holloway, Chief, G3 Plans, for Colonel Swain, USARCENT Historian, Subject: Command Report on Operations Desert Shield and

Desert Storm, dated 20 March 1991. Following description of late November concept is taken from this document.

- 52. Ibid., 11.
- 53. Purvis Group Diary, 10.
- 54. Ibid., 11-13. For VII Corps alternative, see briefing, HQ, VII Corps, titled, "Planning Update," dated 5 December 1990, presented to General Yeosock. On General Rhame volunteering for mission of breach, see interview with Major General Thomas Rhame, Fort Riley, Kansas, 26 July 1991, 57-58; and interview with Colonel Stan Cherrie, Fort Leavenworth, Kansas, 29 August 1991, 3.
- 55. Purvis Group Diary, 12-13. The CENTCOM Desert Storm OPLAN, dated 16 December, allocated the two allied units for planning. For French, see award-winning staff of U.S. News and World Reports, Triumph Without Victory: The Unreported History of the Persian Gulf War, 314; de la Billiere, Storm Command, 50-51, 159-60; Schwarzkopf, Doesn't Take a Hero, 390. For British, see de la Billiere, Storm Command, 48, 92-95, 132-39, 150-52; and Schwarzkopf, Doesn't Take a Hero, 385-86.
- 56. Ibid. See also HQ, ARCENT, G3 (Plans), AFRD-DTP, Memorandum for USARCENT Historian, Colonel Swain, Subject: HQ, USARCENT, G3 Plans, Historical Narrative of Desert Shield, Desert Storm, Defense and Restoration of Kuwait, and Redeployment, dated 6 April 1991, 20-24.
- 57. HQ, ARCENT, G3 (Plans) AFRD-DTP, Memorandum for USARCENT Historian, Colonel Swain, Subject: HQ, USARCENT, G3 plans, Historical Narrative of Desert Shield, Desert Storm, Defense and Restoration of Kuwait, and Redeployment, dated 6 April 1991, 7-9.



## 4

## Planning a Ground Offensive II: The ARCENT Process

The Third Army planning process was marked by continuous dialogue. Discussion took place horizontally, within the ARCENT staff, and vertically, between Central Command above and subordinate corps and support command staffs below. Major decisions were made, or in some cases deferred, at commanders' conferences. Similar processes were going on in each corps. This sort of activity lasted into late January and up to the "commander's huddle," when the army commander and his principal subordinates gathered at King Khalid Military City on 1 February for a final meeting.

By the time General Schwarzkopf and his component, corps, and support command commanders briefed Secretary of Defense Cheney and General Powell in mid-December, the Third Army plan had taken a fairly clear form. The concept called for a two-corps attack on a broad front that would block the Iraqi routes of escape and destroy the Republican Guard Forces Command (RGFC).<sup>2</sup> The Air Force component was responsible for isolating the theater of operations south of the Euphrates River by keeping bridges down. The army commander's intent was to penetrate and envelop the defensive forces, fix and block forward-deployed heavy forces in order to secure the flanks and lines of communication, and continue the attack deep to destroy the Republican Guard.<sup>3</sup>

The VII Corps would be the coalition mass of maneuver. It would carry out the decisive part of the theater commander's ground attack plan as the Third Army's main effort. The 1st U.K. Armored Division, after December under tactical control of VII Corps, would pass through a 1st Infantry Division breach, turn east, and defeat the Iraqi tactical reserves. It would secure, thereby, the deep movement of the U.S. heavy "fist." The fist itself was to consist of the 2d Armored Cavalry Regiment, the 1st and 3d Armored Divisions, the 1st Infantry Division (once the breach was secure), and the 1st Cavalry Division(-), should the latter be released to Third Army by the theater commander. While VII Corps' mission was oriented toward force rather than terrain, it was assigned a zone of action within which to maneuver. The corps zone did not include the highway running northwest from Basrah south of the Euphrates River. That corridor belonged to the XVIII Airborne Corps and, ultimately, to the 24th Infantry Division.

Initially, the VII Corps plan called for the entire corps to pass through a breach to be made by the 1st Infantry Division in the Iraqi defensive line. As the corps grew familiar with the ground and identified the end of the Iraqi defenses—which terminated "in the air" (or simply petered out) about forty kilometers from an escarpment that dominated the right flank of XVIII Corps' zone-plans for the two armored divisions and armored cavalry regiment were gradually modified to move the core of the iron fist around the end of the Iraqi positions but still east of the escarpment. This idea was tested in a simulation conducted in January at King Khalid Military City by the team from the Battle Command Training Program (BCTP). In consultation with his division commanders and in the face of his staff's continuing doubts. Lieutenant General Frederick M. Franks, Jr., revised his plan. The modified version called for a maneuver around the enemy defenses by the 1st and 3d Armored Divisions (behind the 2d Armored Cavalry Regiment), with only the 1st U.K. Armored Division following the 1st Infantry Division through the breach.<sup>4</sup> The end run was to be a tight squeeze. It required the 3d Armored Division to move in a column of brigades with a fifteen-kilometer front. The 1st Armored Division, with a frontage of twenty-five kilometers on its left, was only marginally better off, but this maneuver avoided the necessity of passing successive divisions deployed in column through an obstacle belt.

Once beyond the breach, the corps' armored fist was to move north to the vicinity of Phase Line (PL) Smash, a lateral road about halfway to the Euphrates. It would then turn gradually to the right, looking for the RGFC, which it expected to encounter in Objective Collins, a large open expanse of desert just northeast of the point where the corps would turn eastward across PL Smash. In effect, the corps plan called for two successive, deliberate attacks: first, the breaching operations by the 1st Infantry Division and, second, the movement to contact by the armored fist. The weight of the corps' supporting forces, principally its artillery, would have to be shifted from right to left, from one effort to the other, while the corps moved north. Maintaining balance and concentration would require a good deal of the corps' energy as it moved to the battle.

XVIII Corps, on the extreme left of the coalition line, was to launch the 101st Airborne Division toward As Samawah, on the Euphrates, in the far northwestern corner of the corps sector, to block the Iraqi escape route down Highway 8. The 24th Infantry Division was to launch its three brigades into the empty desert to link up with the 101st and then turn down the same highway to attack enemy

concentrations along the river. The French 6th Light Armored Division, under tactical control of the XVIII Airborne Corps and with the 82d Airborne Division in support, was to attack north on the Third Army's left flank toward the settlement and airfield at As Salman. The 3d Armored Cavalry Regiment was to attack on the corps' right flank, parallel to the VII Corps boundary (the plan called for the regiment to maintain contact with its neighbor).

Planning was based on the assumption that forces and supplies, both of which depended upon a fixed and fairly predictable rate of arrival in theater, would be prepositioned in tactical assembly areas (TAAs) east of Wadi al Batin by 31 January and that the corps would have two weeks, during the preliminary air campaign, to move into attack positions west of the wadi. These assessments are important precisely because they were fixed. VII Corps' 3d Armored Division could not complete its arrival in Saudi Arabia until 31 January (in fact, it was late due to shipping delays and did not close in the TAA until 12 February).6 The fact that the air attack began on 17 January in no way influenced the ground forces' arrival schedule. Indeed, ARCENT's principal task throughout the planning effort seems to have been to find ways, using computer graphics, to display the progressive build-up so that the higher decision makers could understand what forces they had to work with at any given moment. In resolving this problem, the Third Army commander was often his own action officer, supported by his small personal staff with their desk-top graphics. The success, or lack thereof, of any briefing to Schwarzkopf depended on the clarity of the display of information, thus making a staff officer's facility with computer graphics an essential skill at higher levels of command.

The critical constraint was strategic sealift, particularly roll-on and roll-off ships that carried unit equipment sets (soldiers were usually moved by air). There were not enough ships to establish a continuous arrival rate equal to the capability of available ports to receive units. The ground operation was subject, first of all, to the arrival of heavy forces and was constrained by limits on strategic sealift. Second, it was limited by capacity for operational ground movement, which was plagued by shortages in heavy wheeled vehicles, HETs, heavy expanded mobility tactical trucks (HEMTTs), fuelers, and so forth. The quantity of these unglamorous vehicles fluctuated, depending on the Army's ability to bring in, or even find, long-haul trucks of various types. The December briefing to Secretary of Defense Cheney showed a theater requirement for 1,295 HETs and a projected strength of only 788 available from all sources. Only 250

HETs were expected to arrive in the peninsula by 15 January. These wheeled vehicles established the port throughput rate, which never equaled unloading capacity.

G-day, the date of the ground attack, depended on the ability of planners to get coalition forces to the start line. If VII Corps were to participate, that would not be possible at all before 31 January. Even then, the forces would still be incomplete. This was the real significance of the famous December interview with the newly arrived deputy commander in chief, General Calvin Waller. Waller told the press covering Cheney's December briefing that the Army would not be ready to attack by the UN deadline in January (see figure 12). This was correct, although there was certainly sufficient combat power in the peninsula to conduct an air offensive, a fact that appears to have escaped the journalists.8

The other key operational issue was the likely ratio of opposition to friendly forces. This calculation was, by necessity, purely Jominian. It was presented as such on a briefing slide that projected 50 percent attrition of the enemy by the air campaign. Given this assumption, VII Corps would have an advantage of 11.5:1 at the breach site, 3.8:1 en route to the Republican Guard, and 2:1 at the decisive point.9 These figures are important because the overall force ratio expected in the VII Corps' sector (counting friendly and enemy brigades as roughly equivalent) was assumed to be no better than 1.3:1, far below any acceptable theoretical rule of thumb. VII Corps was seeking, in Jomini's words, "to obtain by free and rapid movements the advantage of bringing the mass of the troops against fractions of the enemy." That these calculations may have been proved pessimistic by subsequent events in no way detracts from their influence on the planners and fighters who believed them at the time.

Between 23 and 28 December, a group directed by General Pagonis conducted a planning exercise in Dhahran to develop a final movement plan for repositioning Third Army west of Wadi al Batin. Pagonis and his staff had been developing movement plans to support various offensive options since September. The purpose of the December exercise was to fill in details for the execution of Schwarzkopf's concept, with particular regard to logistics—the provisioning of food, fuel, ammunition, medical support, and, always the critical issue, transportation. All this had to be laid out against a schedule. Major Steve Holley from the Third Army G3 (plans) and Colonel Robert Kleimon, the ARCENT transportation officer, represented the ARCENT G3 and G4. The result was publication of a

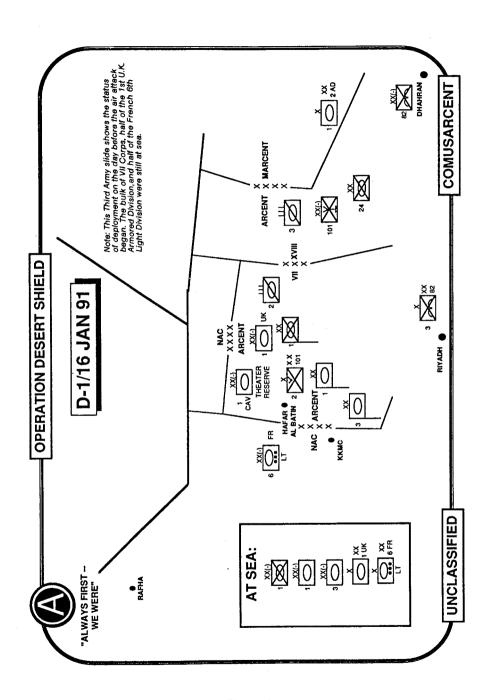


Figure 12.

transportation annex for the attack plan and a briefing for the commander in chief that was given on 28 December.  $^{12}$ 

Schwarzkopf's strict guidance in support of the deception effort was that no preparations for Desert Storm were to be made west of Wadi al Batin prior to initiation of the air campaign. Because of the distances involved in the operational redeployment and those anticipated during the offensive, it would be necessary to create two forward logistic bases (one for each corps) west of the wadi. This could not begin before D-day. The movement briefing assumed a D-day (air attack day) of 16 January and a G-day (ground attack day) of 1 February. Based upon these dates, the logistics plan provided for creation of two theater army logistic bases, Charlie and Echo, west of the wadi. Three intermediate bases-Alpha, Bravo, and Delta-were to be established in the east (see figure 13). These could be filled prior to D-day. They were essential, in any event, to support the forces deploying into tactical assembly areas, as well as serving as intermediate depots thereafter. Log Base Alpha, around which VII Corps was to form in the desert, was located on Tapline Road at the forward end of the corps' defensive (Desert Shield) zone. As early as October, Pagonis and his staff had planned to begin building up supplies forward in the Desert Shield zone to facilitate future offensive options.13

The two corps would plan subsequently to open corps forward bases (Oscar, Romeo, and "Nellingen") along Main Supply Route (MSR) Virginia, the lateral oiled road (also PL Smash) through the desert about halfway to the Euphrates. These bases would be one day's round trip along the Tapline Road from the theater bases to the south. A day's round trip beyond MSR Virginia, the division support commands would establish their forward bases, and the fighting units would operate about a day's drive beyond them. In short, the army would reach its operational (logistic) limit at about the point it ran out of terrain to clear. 14

Based upon projected transportation resources and anticipated arrival dates, Pagonis and his group estimated Log Bases Charlie and Echo would reach their desired stockage levels (five-day supply of rations, 3.4 million gallons of fuel, and 15,000 to 45,000 short tons of ammunition for XVIII and VII Corps respectively) no sooner than 11 February. The build-up of Army medical capacity, 11,280 beds (in Saudi Arabia or loaded on vehicles for movement), would be finished no sooner than 13 February. Units were expected to be in attack positions by 7 February.

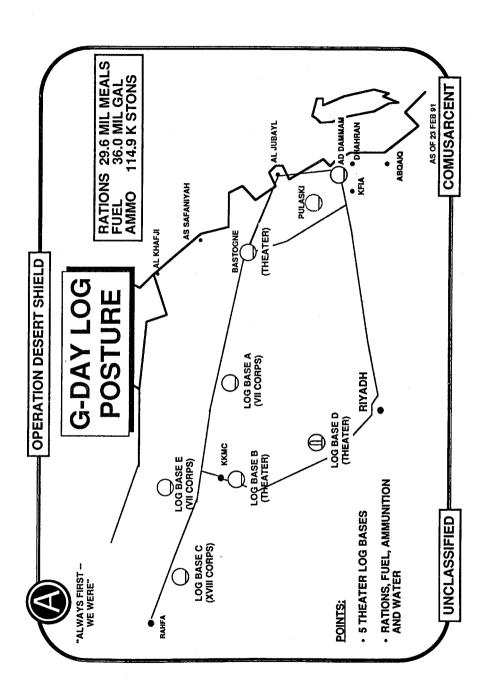


Figure 13.

Each briefing chart told the CINC where he would be on the road to completion on any possible G-day. Three large flow charts displaying transportation availability were created. These showed the daily requirement for line-haul trucks and a forecast of the number available. Interestingly enough, the transportation estimates showed a deficit of vehicles, which would have to be made up from some source if time lines were to be met (see figure 14). In short, success required significant acquisition of transport vehicles and movement of them on schedule. The CINC told Pagonis that these projections were his "contract." 18

From 27 to 30 December, while the logistics study was being completed, the Third Army commanders and their staffs met at the new army headquarters for the MAPEX. Originally, General Arnold's intention was that this should be a war-gamed exercise, but this seems to have run afoul of the commanders' sense of their prerogatives or just the number of people involved. 19 Instead of a war game, this meeting was, in fact, a mutual briefing session in which questions could be asked by the commanders and principal staff officers (and the staffs then turned loose to resolve the issues raised) and issues requiring further work or decisions could be identified. The results were briefed back to the commanders on the 30th. Representatives from CENTCOM, CENTAF, MARCENT, and SOCCENT attended, and. indeed, one of the major long-term issues carried out of the exercise was a concern about the extent to which the Army would be able to influence the air preparation of the battlefield. Another issue involved the distribution of resources. This was generally accomplished to the detriment of the XVIII Airborne Corps, now a supporting actor rather than the only show in town. The evolving plan called for the corps to attack into an area that just did not have many enemy forces to overcome. General Luck appeared to find this experience somewhat frustrating.20

On 4 January, Yeosock and Arnold went again to Central Command headquarters to brief the theater commander on the ARCENT concept of operations. The object of the briefing was somewhat confused. Information had arrived that Syria would not agree to its troops participating in the offensive. At best, this required some readjustment of missions along the coalition front lines. At worst, it sowed suspicions that Syrian forces might go over to the Iraqis if the attack itself seemed unlikely to succeed.<sup>21</sup> Moreover, the Egyptians used the event to request substantial support from the United States as insurance against failure. Among other things, Egypt requested reinforcement by an American division and attachment of

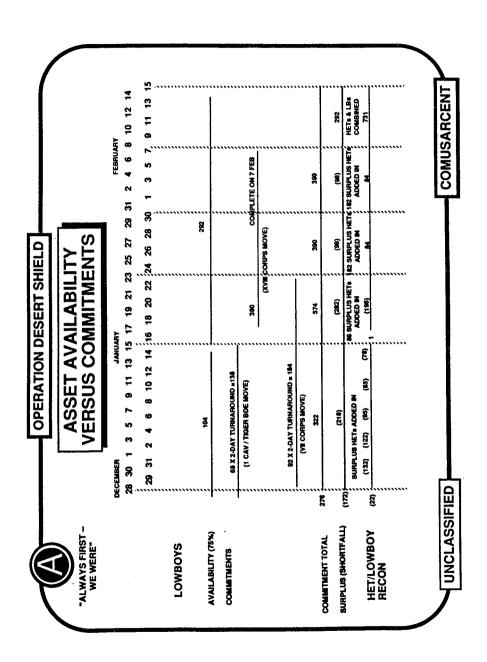


Figure 14.

U.S. attack helicopters. Yeosock was challenged to find alternatives to present to Schwarzkopf that would reassure the Egyptians without weakening the theater main effort.

The briefing seems to have been intended originally to address the adjustments that the Syrian decision might demand, but Yeosock also had another agenda. He had to "smoke out" from Schwarzkopf, now rather late in the day, clear indications of the limits of his own freedom of action as field army commander. Somewhat typically, he would do this by indirection, to no little discomfort on the part of Arnold, his G3, who in such cases served as the stationary target for the CINC. Schwarzkopf's patience was probably not improved by the frustrations that had led to the need for such a briefing: four days of high-level squabbling with his Arab allies, a report that a British staff officer in London might have compromised the plan, and the fact that he had spent the day of the briefing in the north, attending a grand review for the Saudi king.<sup>22</sup>

Yeosock and Arnold went to brief Schwarzkopf with a set of options rather than a single ARCENT concept of operations. This method frustrated Schwarzkopf, who dismissed his subordinates with some heat and ordered them to come back in four days with a new briefing.<sup>23</sup> Arnold was clearly crestfallen by this experience, but Yeosock left believing he now knew the rules of the game, albeit at some cost to his G3's self-esteem.<sup>24</sup>

Schwarzkopf had attacked his subordinates' plan on three main points.<sup>25</sup> The first was the decision to send the XVIII Airborne Corps' 101st and 24th Divisions northwest to As Samawah. The second was his belief that ARCENT and VII Corps were greatly overestimating the practical strength of the Iraqis, particularly following the anticipated 50 percent attrition of them by the air interdiction program. Finally, Schwarzkopf was extremely discomfited by the idea that, as the plan was presented to him, VII Corps intended to observe an operational pause, once the corps was through to the enemy tactical depths, to rearm and refuel in the vicinity of Objective Collins. According to the one non-general officer present (the "slide turner" at the briefing), Schwarzkopf expressed the view that if VII Corps halted along Phase Line Smash to rearm and refuel, it would miss the war that he predicted would be over in twenty-four to forty-eight hours.26 Notably, in light of later developments, General Franks was not present at this briefing.

Schwarzkopf's "guidance" addressed a number of other issues for reexamination: the role of the 82d Airborne Division (as a follow-on force and in support of the French 6th Armored Division), the location of boundaries, the timing of attacks (synchronization of the corps), and the location of the XVIII Airborne Corps attack. Schwarzkopf directed that forces stay out of built-up areas and towns and that no force be put at risk to block Highway 8. Logistic support remained a further concern.<sup>27</sup>

There were substantive issues about which Schwarzkopf had good reason to be concerned. Leaving aside for the moment his objection to the XVIII Corps plan, the CINC's optimism about the Iraqis' powers of resistance seems to have been borne out by the events that followed. There is no evidence, however, that he ever convinced his subordinates that he was correct in this view, and ARCENT's assessments remained sober through G-day. Schwarzkopf seems to have been unwilling to impose his views on his Army commanders and unable to convince them. His concerns about the threat and the importance of maintaining momentum are important in light of subsequent events.

The idea of an operational pause was a concept that seems to have originated with staff planners. It was an idea that senior commanders were never able to kill. It was compounded by a confusion over the precise meaning of this quasi-doctrinal term. General Franks had decided as early as a pre-Desert Shield Battle Command Training Program exercise in Germany that accepting an operational pause, if by that one meant stopping the entire corps, would be to surrender the initiative. At the MAPEX in December, he spoke of the importance of relentless attack. 29

The ARCENT staff, nonetheless, had discussed such a pause along Phase Line Smash, the one east-west line of communications (MSR Virginia) in southeastern Iraq running through As Salman. But Yeosock ultimately rejected the idea for the same reason Franks did. Indeed, in a postwar discussion, Yeosock indicated that above the brigade level, the corps was always in motion. The reconnaissance line, he noted, advances at about five kilometers an hour, slow enough that the armored brigades, which are the fighting formations of a corps, can stop periodically to rest and refuel and still catch up by employing their power of acceleration, since they are traveling through a zone already cleared. 30 In Yeosock's mind, a pause was no more than an intellectual stocktaking. He clearly believed such stocktaking would be necessary before closing with the Republican Guard. The Guard was bound to react to VII Corps' initial penetration, and the final attack plan had to account for whatever the enemy did. It also appears that he intended to meet with the corps commanders to review the situation when the troops crossed PL Smash, but that would not, in itself, require stopping divisions, which advance pretty much on their own.<sup>31</sup> Interestingly enough, given some of the postwar criticism, Franks remembered later that General Waller raised the matter of a pause with him just prior to G-day, at a time when Waller was acting as Third Army commander in Yeosock's absence.<sup>32</sup> The idea of a "pause" seems to have been on a lot of minds.

Whatever the commanders thought, the staffs knew that the maneuver brigades (and divisions) would run out of fuel about the time they got to PL Smash, and they continued to address among themselves the necessary refueling halt in terms of a pause. The 2d Armored Cavalry Regiment assumed the need to stop for fuel on PL Smash in a late December staff exercise. The 1st Armored Division plan allowed for time to refuel and regain balance before attacking across PL Smash.<sup>33</sup> In the XVIII Corps area, the 24th Infantry Division foresaw a pause-refueling halt before advancing beyond PL Smash and again before its last attack southeast along Highway 8.

The fuel problem did not go away. The question boiled down to how much of the force would stop, at any time, to refuel and rearm before getting on with the war. Could refueling be accommodated by rippling it along the front, a brigade at a time? Because large units, divisions and corps, rarely exercise as complete units in the field, the problem of refueling a division, much less a corps on the move, is seldom confronted. Moreover, refueling in an offensive posture is harder to accomplish, than while in a delay or retrograde movement, because of the need to carry fuel forward to the moving forces rather than being able to preposition it along the way. It seems apparent that the term "pause" had different connotations for different officers depending on their immediate concerns and that much of the discussion that seemed to settle on the issue only sowed further confusion.

There remained the problems of the XVIII Corps plan to attack toward As Samawah on the Euphrates, in the northwest corner of the corps' sector, and Schwarzkopf's belief that the ARCENT commanders overestimated the enemy. Aside from the distance over which sustainment would have to be accomplished—down the road to Rafha and up to As Samawah—this objective would take the 24th Infantry Division and the 101st Airborne Division away from the main attack before they turned down the Euphrates valley along Highway 8. The force, attacking into a great empty area, would not be in supporting distance of VII Corps.

Why had the army commander not pulled the 24th Infantry Division in toward the main attack to begin with? Perhaps the first explanation to suggest itself is that the idea of going to As Samawah had originated with Schwarzkopf himself, and he had shown himself ready to react violently to any attempt to question his concept by providing alternatives. Indeed, at the MAPEX, General Luck stated quite clearly that the principal argument for the move was its origin. The CINC said to do it that way! Second, Yeosock would seem to have been reluctant to interfere with the corps commander's judgment of how to do his business, perhaps as a result of an ambiguity still existing about the army commander's authority over operational questions between the CINC and the corps commanders. Luck had been given a mission and forces to accomplish it, and Yeosock was not disposed to interfere with his subordinates unless he perceived a risk to the whole operation.

Third, XVIII Corps had a real practical problem with the alternative to its planned route. A large area in the center of the corps' sector consisted of very rough, rocky terrain. If the corps sent its mobile forces east, they would have to move across this area, perhaps against resistance; they might also be pushed into a narrow sector of advance in order not to interfere with the VII Corps' maneuver space, essential for it in the main attack when it would send as large a force as possible around the enemy fortifications.<sup>35</sup> If there was resistance, the 24th Division might not arrive at the Euphrates in time to achieve its mission of blocking the enemy route of withdrawal.

Fourth, there were few potential lines of support available to XVIII Corps, but one ran from Rafha, through As Salman, to As Samawah. The 24th Division probably could have gotten to that point to link up with the 101st, but it would have become increasingly attenuated as it advanced down the Highway 8 corridor toward Basrah. Indeed, the plan provided only for a ground advance to Tallil (with a possible follow-on assault by the 101st toward An Nasiriyah). On the other hand, if the corps' heavy forces were to advance in the eastern sector, as they ultimately did, initial support would have to come through As Salman and turn east until a more direct route was created by engineers in the rear of the advancing heavy forces. Then, VII Corps would have to open a line of communication for them through its own rear area once they turned southeast. The VII Corps could not do that, however, until after its own maneuver forces had turned east, and no commander likes his MSR in someone else's territory. This, in fact, is what was done. XVIII Corps did try and fail to gain possession of the necessary strip of terrain by requesting a boundary change, a request pursued into Desert Storm. Consideration was given to attaching the 24th Division to VII Corps for that part of the operation, but the idea never gained support with either General Waller during his interregnum as Third Army commander or General Yeosock.<sup>36</sup>

In short, these questions came down to a subjective appreciation of relative risk and comparative gain. If the Third Army and XVIII Corps commanders elected to move the 24th Infantry and 101st Divisions east, there was the risk of the enemy reacting to the initial attack and confronting the turning force37 in compartmented and generally rough terrain. There was also a risk inherent in a more complex sustainment problem and, perhaps most important, the risk of appearing to challenge Schwarzkopf in an area of command he felt was peculiarly his own. Nonetheless, it is difficult to argue with Schwarzkopf's final conclusion. If VII Corps required the assistance of XVIII Corps' heavy forces to destroy the Republican Guard, the "Victory Division" would have been too far away under the original XVIII Corps plan. If it turned out that they were not required for the destruction mission, any slowdown in their northward progress as a consequence of eastern sustainment problems would not matter much. The CINC might always call on air power to block the Highway 8 line of retreat until the ground forces could establish a blocking position. The 101st Airborne Division made it to the river first in any event! The advance to the Euphrates by the 24th Division was almost unimpeded except for the difficulties of terrain, and the division was on the river on G+2. The advance of the Victory Division demonstrated again B. H. Liddell Hart's assertion: "Natural hazards, however formidable, are less dangerous and less uncertain than fighting hazards. All conditions are more calculable, all obstacles more surmountable, than those of human resistance. By reasoned calculation and preparation they can be over-come almost to time-table."38

All this seems to have been Yeosock and Luck's conclusion as well, because when Schwarzkopf was briefed again on 8 January, the axis of advance for the 24th Division was moved to the general direction of An Nasiriyah to the northeast, with the 24th Division and 3d Armored Cavalry Regiment, in effect, becoming the outer wing of Schwarzkopf's great wheel.<sup>39</sup> At this briefing, the slides depicting the build-up were far clearer and more definitive. Not surprisingly, Schwarzkopf approved the plan. What should have been far more unsettling for the army commander was the theater commander's very optimistic views about the likely effect of the air effort on the Iraqis'

ability to resist on the ground and the idea that ARCENT commanders were greatly overestimating the strength of the enemy.

Those who would actually be called upon to lead ground forces into battle would remain far less sanguine about the effect of the air campaign on enemy capabilities than the theater commander, and therein lay much mischief. Schwarzkopf may appear to have been vindicated by events, though the clear technological advantages enjoyed by ground forces in direct-fire engagements and artillery counterbattery fire may lead one to underestimate the resistance still remaining in the Republican Guard forces and the Iraqis' better regular army units.<sup>40</sup>

Before 28 February, none of that could be known for sure. General Franks, who would lead the coalition's main attack, argued consistently for what he believed were three essentials for success. These were relentless attack (no pauses once the operation was under way), maintenance of concentration—hitting with a closed fist rather than open fingers—and the absolute need for three heavy divisions at the point of impact with the RGFC, this based upon various means of analysis and simulation and, no less, on professional judgment.<sup>41</sup>

The need for concentration meant a tightly controlled advance and a corps attack that moved deliberately in a particular sequence. The fist, the 1st and 3d Armored Divisions and the 2d Armored Cavalry Regiment, would have to move under corps control to begin with, just to avoid having the units separated or intermingled something to be avoided, not only to maintain concentration but also to avoid fratricide. The rate of march, like that of a fleet at sea (which the divisions so closely resembled on the desert floor), could not exceed the speed of the slowest vehicle, very likely the M109 howitzer, which moved no faster than fifteen miles per hour. Moreover, the whole body could not get so far ahead of the 1st U.K. Armored Division as to expose the "fist's" eastern flank to interruption by Iraqi tactical reserves. Moreover, since the 1st Cavalry Division(-) did not appear likely to be released in time to get into the VII Corps fight with the RGFC (as the division's release was increasingly tied to the success of the Egyptian attack), the 1st Infantry Division would have to be the third heavy division upon which the VII Corps commander believed success rested. That meant, again, that the wheeling divisions would have to retard their movement long enough for the 1st Infantry to breach the enemy line, pass the 1st U.K. through, then fall in on the "fist's" right or rear. This, too, called for a highly disciplined, closely controlled maneuver, not the "devil-take-the-hindmost" charge-of-thelight brigade rash and gallant dash the more romantic critics would seem to have anticipated. $^{42}$ 

The difference in opinions about the situation comes back to differing degrees of confidence in the ability of the air operations to break the spirit of the only forces in the theater that mattered—the heavy forces of the Republican Guard and the regular Iraqi Army. Also worthy of much discussion were the implications of concentrating and maneuvering twenty-five armored battalions, sixteen mechanized battalions, and three regimental cavalry squadrons (8,508 tracked vehicles, 27,652 wheels) in a confined space. After 8 January, however, the broad outline of the ARCENT Desert Storm plan was set, and internal planning and negotiation turned to matters of force allocation and details of execution.

On 1 February, General Yeosock held his final commander's planning meeting at King Khalid Military City, site of his mobile command post and the support command forward headquarters. Attending were the corps and support command commanders, the ARCENT's primary staff, and the commander of the theater reserve, Major General John Tilelli, Jr. By 1 February, air operations were in their sixteenth day. Most of VII Corps had closed into the tactical assembly areas around King Khalid Military City, and XVIII Corps was well into its displacement to the west. G-day was approaching, but as yet, the estimated attrition of the Iraqi forces in Kuwait was disappointing to the Army commanders. 43

The logistic build-up continued, and anyone driving south on either of the MSRs would have been overwhelmed by the number of heavy trucks of all sorts on the road north. The most important service member in theater was probably the military policeman at the intersection of the main highways at Hafar al Batin, who fed the traffic from east and south into the combined westward flow (see figure 15 for distances between major locations). No one driving south or east in the face of the endless convoys—containing everything from armored vehicles on carriers to fuel trucks, ammunition trucks, and flat-beds full of mail or, alternatively, prefab privies—could doubt a major attack was imminent.

The "commander's huddle" was held in the aftermath of the battle of Khafji. Khafji was the single Iraqi attempt, on 29 January, to conduct a spoiling attack against the Saudi Joint Forces Command East and the U.S. Marine forces. The defeat of this probe seems to have reinforced Schwarzkopf's confidence that the Iraqis would not be able to mount a coherent defense. If anything, Khafji had the opposite effect

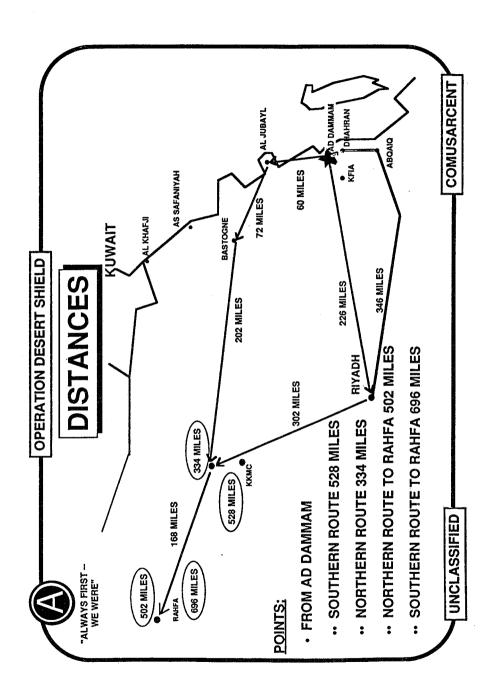


Figure 15.

on the ARCENT commanders.<sup>44</sup> This was no meeting of men confident that the enemy would not stand. These were men seriously intent on seeing to it that when they closed with an enemy, whom they fully expected to fight and fight hard, they would have every available means at hand. Emphasis was on achieving simultaneous employment of the total ARCENT heavy force (from both corps) when it came time to fight the Republican Guard. Concern was expressed about the potential use of gas by the Iraqis, a capability that was taken quite seriously by all concerned, through G-day and through the four-day battle that followed.

The G2, Major General John Stewart, laid out three major possibilities for employment of the Republican Guard. The first of these was to counterattack if the Iraqis sensed a possibility for success. The second was to fall back and defend Basrah and Kuwait City to drag out the war. A third possibility was another drive south to seize a bargaining chip in case of a stalemate. 45 General Yeosock estimated the Republican Guard would either "hunker down" at Basrah and give up Kuwait, or it would defend and stand fast. In any event he was not prepared, now or even on G-day, to decide before it was necessary on the particular plan for the destruction of the Republican Guard. Like the Elder Moltke, he would wait and see how the plan survived the first contact. 46 In response to a question from General Franks, Yeosock said the corps would likely receive its first order from him the first night, but it would be for execution seventy-two to ninety-six hours later.47 In the event, however, the war would move much faster than anyone anticipated on 1 February.

By the time of the "commander's huddle," the Third Army attack had been thought through in extraordinary detail. Multivariate matrices plotted battlefield preparation actions for the eight days preceding the attack, and the ARCENT staff produced a twenty-three-page written scenario that examined various enemy responses to ARCENT's actions and possible reactions. A detailed planning time line anticipated closing with the Republican Guard Forces Command at H+74 in a scenario in which VII Corps did not begin its attack until H+26.48

What the "huddle" did not do was produce a decision on the preferred option for the destruction of the RGFC or for the actual timing of the attack across the front. In part, these issues may have been deferred because they were not subject to final resolution at that time. That more was not accomplished may also have been because the meeting got badly off schedule and the anticipated executive session

could not be held after the staff briefings because General Luck had to leave for another engagement.<sup>49</sup>

The split timing of the various attacks, particularly the synchronization of the attacks of the two corps, had been a point of contention with Schwarzkopf and continued to be a matter of discussion at the "commander's huddle" and after. According to the plan, the Marines and Joint Forces Command East were to attack on G-day. The VII Corps and Joint Forces Command North were to attack on the following day, on G+1, after Iraqi attention and reserves, it was hoped, had been fixed by the G-day attacks. The reasons for this were complex (see figure 16).

Because the engineers would have to establish a direct line of communication behind the 24th Infantry Division and 3d Armored Cavalry Regiment, and the road for this would not be immediately available on G-day, XVIII Corps wanted to attack with the French 6th Light Armored Division and 82d Airborne Division on the corps' left at least twenty-four hours (twice as long as originally planned) before the heavy forces in order to open an initial main supply route through As Salman. The 101st Airborne was to conduct an early morning air assault on G-day as well, to a forward operating base midway to the Euphrates River. Intending to synchronize the coalition's logistics flow with its maneuver, planners also argued that these attacks would pose a threat fixing Iraqi forces not vet deployed to the south. Of course, the attacks might also have drawn Iraqi mobile forces west, before the coalition's heavy forces attacked. That was not necessarily bad, since it would pull the Iragis into the open for attack from the air and perhaps jeopardize their flank. By seizing As Salman, the corps would not only protect ARCENT's left flank but would allow supplies to flow north. then east, on the lateral oiled road (MSR Virginia). The corps would also build the coalition's first intermediate logistic base to the east of As Salman.50

For the most part, the ARCENT's planning effort was completed at the "commander's huddle." Questions of the roles of the two headquarters echelons (corps and army) also seem to have been resolved. On 9 February, the secretary of defense and chairman of the Joint Chiefs of Staff returned to Riyadh to receive a briefing from General Schwarzkopf and his commanders on preparations (and presumably the need) for a ground offensive. General Yeosock; General Franks; the commander of the 24th Infantry Division, Major General Barry McCaffrey; and the commander of the 1st Armored

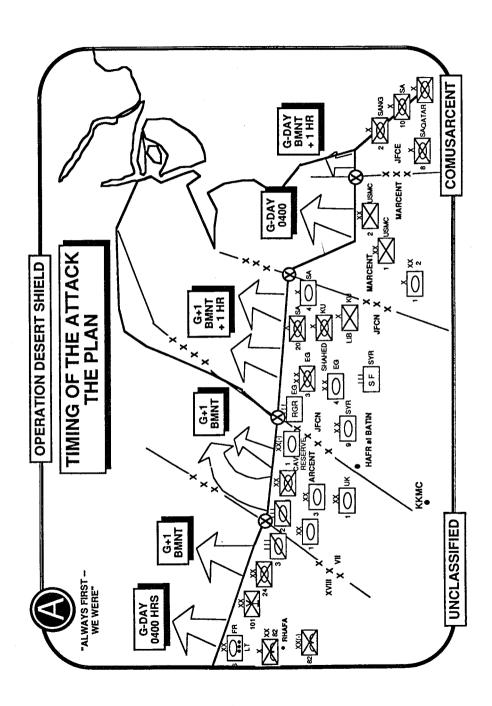


Figure 16.

Division, Major General Ronald H. Griffith, briefed their respective plans.

Prior to the briefing, Schwarzkopf expressed his concerns to Yeosock that the VII Corps attack might be overly cautious in light of the extent of the aerial preparation. "I want VII Corps to slam into the Republican Guard," he said, and warned against any pause for rearming and refueling in light of the chemical threat.<sup>51</sup> Yeosock explained Franks' concerns to the theater commander. Beyond that, it is not clear what else he was to do. First of all, he seems to have shared the general skepticism of the other ground commanders that the aerial preparation would be as effective as advertised.<sup>52</sup> Then, he was as aware as his corps commander that the initial challenge for the heavy corps would be winning the necessary maneuver room. This challenge would require, on the one hand, squeezing two heavy divisions into a narrow opening between the Iraqi defensive line and the escarpment to the west and, on the other, a deliberate breaching operation by the 1st Infantry Division. The breaching operation would be followed by a passage of lines by the 1st U.K. Armored Division (reinforced by the U.S. 142d Artillery Brigade, Army National Guard). The British were to turn to the east and attack the Iraqi tactical reserves in order to protect the corps' flank and to relieve the pressure on the Egyptian Corps, thus freeing the theater reserve for the main attack. To Yeosock and Franks, these deliberate preliminaries were essential if the Third Army and VII Corps' mass of maneuver—three armored divisions and an armored cavalry regiment—were to "slam into the Republican Guard," which had to be located and fixed. Having explained Franks' tactical concerns to Schwarzkopf and having acknowledged the CINC's operational intent, Yeosock kept his own counsel when discussing the issues with Franks, who continued to believe his plan had Schwarzkopf's confidence.

The ARCENT briefing on the 9th addressed the attrition of the enemy force, noting that it had not reached the 50 percent desired; moreover, it was proceeding at a rate one-half that required. General Stewart displayed a chart showing that, given an increase of 1 percent a day (to 2 percent) in the rate of attrition, the 50 percent point could be reached in two weeks. 53 This, of course, implied an increased investment of air assets in preparation for the ground attack.

Based upon this estimate, a graph was shown indicating to Secretary Cheney and General Powell that, if the decision were taken to begin the necessary preparation of the battlefield for the ground attack (G-13), movement into attack positions could begin in six days (G-7) as attrition mounted, and preparation for attack would follow

from G-5 to G-day.<sup>54</sup> (See figure 17.) No dates appeared on the slide, but as the date of the briefing was the 9th, the earliest date that would meet the schedule for the attack was the 23d. This chart was followed by a depiction of final ground preparations (G-8 to G-day), the timing of attack, and alternatives for achieving destruction of the Republican Guard based upon the enemy's response. Other charts demonstrated that after 21 February, the sustainment resources (particularly trucks) necessary for the operation would be in-country. Based upon a continuous monitoring of Iraqi maneuvers, or rather the complete failure to detect any in the Kuwait theater of operations, the ARCENT commander concluded that the enemy would not maneuver but that he would fight, that the corps were ready, and that there was sufficient fuel and ammunition on hand to support the plan.<sup>55</sup> (See figure 18.)

General Franks briefed the ARCENT main attack. He was followed by General McCaffrey and General Griffith, who seemed to have been present to show the chairman that the tactical details of communications, movement, and sustainment had been worked to the last detail, as well as to give the high command a sense of the confidence of the leaders who would actually direct the coming battle. In his memoirs, Schwarzkopf adds gratuitously to his account of these briefings: "All very impressive, I thought, except Franks, whose plan was still too deliberate and who insisted on telling the secretary and the chairman that he was to need the reserves." <sup>56</sup> If the theater commander felt that way at the time, there is no evidence he allowed his frustration to find voice, either in the presence of his superiors or after their departure.

At the end of the rehearsal briefing at ARCENT on the 8th, in response to an inquiry from Yeosock if anything else was on their minds, Franks observed that, while it was above his pay grade, he hoped someone had thought about how it all was supposed to look on the ground when it was over. He hoped someone had thought about a "war stopper." Later, Franks would observe that at the end of his briefing on the 9th, the secretary of defense raised the same question and asked how Franks thought the end of the ground battle would look. In the event, the complex problem of war termination would be the one detail not well thought out by the strategic leadership before the secretary's question was posed. Events on 28 February raised the question of whether it was adequately studied thereafter. Franks and McCaffrey would find themselves in no small difficulty as a consequence.

A World War I general, perhaps French Marshal Joffre or Field Marshal Hindenburg, was once asked who had won his greatest battle.

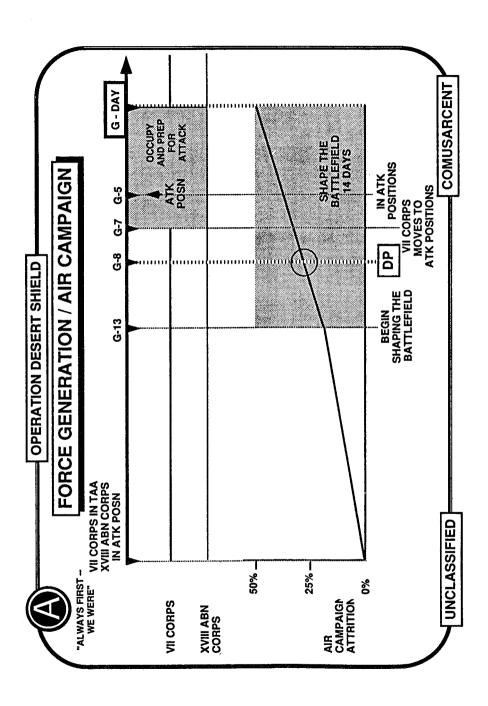


Figure 17.

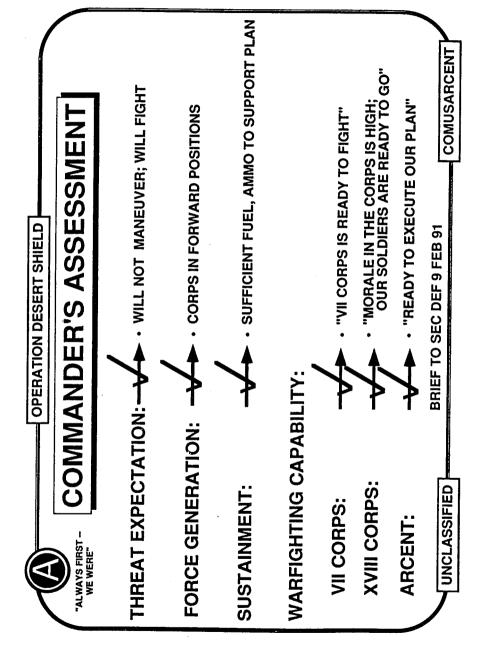


Figure 18.

It is said that he thought for a moment and replied: "I don't know who was responsible for the victory. But I know who would have been blamed for the defeat." The commander is always responsible, particularly for defeat. Victory, according to an old proverb, has many fathers; defeat is an orphan. Among the several things that stand out in the Desert Storm planning process, perhaps the most important is that the Desert Storm plan was the result of a process, not an event, not one man's brilliant or clever insight.

Perhaps all successful military operations are the product of the corporate skills of the institution, but this was particularly the case of Desert Storm, Colonel Joe Purvis and his team started the process with a good deal of personal direction (and sometimes abuse) from General Schwarzkopf. Certainly Schwarzkopf's forensic abilities counted heavily, both in convincing Colin Powell that two corps were required for an offensive and in articulating to his subordinates a clear vision of what they were about. General Steve Arnold's role was decisive in linking the efforts of ARCENT and the two corps with those of CENTCOM. Tireless and good humored, even under what at times was severe hammering from Schwarzkopf over issues like planning for the employment of the theater reserve. Arnold was the heart and soul of the ARCENT staff planning effort. His ability to draw in and combine harmoniously the efforts of multiple, independent, and often competing agencies and powerful personalities was matchless. General Pagonis was everywhere on the MSR in his command van with cellular phone in hand, but he was still able to oversee planning of the most difficult and dynamic logistic build-up since Korea, and he saw to it that the operators' goals were made possible. Many supporting agencies not addressed here, the CENTCOM Analysis Agency and BCTP representatives particularly, provided simulation analysis to support the commander's judgments and provide many bright ideas as well. Finally, the ability of the Third Army commanders to bury their differences and strong personalities to produce a comprehensive plan like that for Desert Storm is a tribute to the character of the men who have risen to command the Army of the nineties.

The plan itself had several points of interest. First of all, although the CENTCOM OPLAN spoke of a campaign of four phases (strategic air campaign, air supremacy in the KTO, battlefield preparation, and ground offensive plan), the coalition offensive would consist of two separable and distinct parts: (1) an air offensive of three parts (attacks to achieve air supremacy, strategic bombing in Iraq north of the KTO, and air operations in the KTO designed to reduce the Iraqi forces in

occupation) and (2) an air-ground offensive should it prove necessary—all carried on within the ongoing naval interdiction effort. The logic of the strategic situation would not require a follow-on ground operation if Saddam Hussein bowed to the logic of his situation and agreed to withdraw and comply with the pertinent UN resolutions. Certainly, the air operations provided significant persuasion to that end. It is equally certain that the air operations were unsuccessful in convincing Saddam to retreat under circumstances acceptable to the president and the coalition leadership.

The requirement for subsequent political permission to undertake ground operations shows that the ground offensive was conceived to be an escalation, separable from the air attacks. The ground attack was contingent, not concomitant, to the air campaign, notwithstanding Schwarzkopf's complaints in his memoir that he was repeatedly pressured to initiate a ground attack before he was ready. Ultimately, the plan fit neither of the two patterns posited at the start of the last chapter: destruction by maneuver-induced psychological dislocation or rear attack. Rather, it was an amalgam, perhaps best characterized as pragmatic. The plan clearly hoped for psychological dislocation (albeit one achieved by aerial fires as well as maneuver). But the plan ultimately provided for physical destruction at all levels should that be required.<sup>59</sup> Indeed, the physical destruction of Iraqi armored forces became an important, if collateral, objective to ensure future regional stability—a strategic goal. At the end of the day, there is little so psychologically dislocating as daily subjection to a battering from which there is no relief and for which there is no reply.

This understanding of the theater campaign plan is important, because it accounts for the fact that commitment of air resources to prepare the ground specifically in support of the Army ground operation (as opposed to achieving attrition of the forces in the KTO as a part of the air campaign) was delayed until eight or nine days before the start of the ground attack. The campaign of attrition (the first part of Phase III) was directed by the joint forces Air component commander in accordance with the theater commander's guidance and priorities—a fact many Army ground tactical commanders found hard to accept, though it was entirely consistent with the nature of the campaign plan. Once the decision was taken to launch the ground attack (and final approval undoubtedly followed the visit of the secretary of defense and chairman on 9 February), air resources began to be employed to prepare for ground operations. At the same time, the Air Force continued the general process of air-ground attrition, strategic bombing, and maintenance of air superiority.

The allied ground forces were employed in ways that accorded with their capabilities and the needs of the coalition. The "piano kev" deployment of the forces across the front-Joint Forces Command East, MARCENT, Joint Forces Command North, and ARCENTensured that the two Arab-Islamic commands could call on U.S. components for assistance, particularly for help obtaining and controlling air support (see figure 19). It also ensured that Arab forces were properly positioned to liberate Kuwait City. The Egyptian Corps. part of Joint Forces Command North but a force with which the U.S. Army had some experience through periodic Bright Star exercises, was aligned with VII Corps' eastern flank. The U.S. Army provided support on a bilateral basis to bolster the Egyptian effort, to include the loan of some required breaching equipment, positioning of the theater reserve, and the provision for on-call AH-64 support. Third Army sent a special liaison team to the Egyptian Corps as well as to Joint Forces Command North.

MARCENT was positioned near the coast in light of the short operational reach of Marine forces and appeared to be the landward part of an amphibious envelopment. The Marines were highly visible on CNN and in press reports, an unwitting contribution by the news media to misleading the Iraqis. The 1st U.K. Armored Division was employed with the NATO-based U.S. corps in accordance with the British desire to take part in more open, less costly maneuver operations. The French, whose thoroughly professional but light force was based on the Red Sea to the west, were placed on the ARCENT's left to seize As Salman and open the limited road net behind XVIII Corps, a task they accomplished in exemplary fashion in the time deemed necessary by the XVIII Corps before the fact.

The burden of the planned ground attack rested firmly on the VII Corps. All else could come a cropper and yet, if VII Corps succeeded in destroying the Republican Guard and Iraqi operational reserves, come right in the end. If VII Corps failed and the Republican Guard was able to counterattack, the offensive through the Iraqi defenses could become very bloody indeed, although the success of U.S. air power against the Iraqi armored forces at Khafji probably indicated that coalition success was inevitable once the Iraqi forces had to come above ground and concentrate to resist the attacking ground forces. That was not yet as clear in February 1991 as it is today. What was clear was that air supremacy was a sine qua non for the entire ground effort, as was the preattack concentration west of Wadi al Batin.

Ultimately, the ARCENT plan was Lieutenant General John Yeosock's. Not because he can be seen working any particular part of

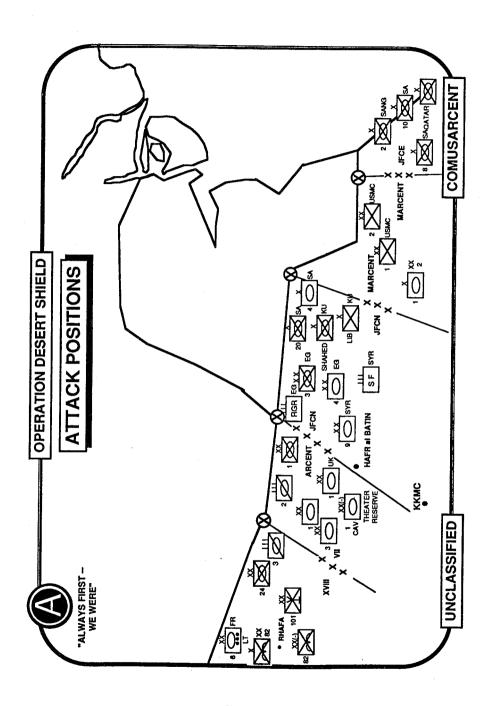


Figure 19.

it. Indeed, he seemed to have spent the greatest part of his time in the introduction of Army forces into the theater, provisioning of hostnation support, creation of an echelon-above-corps intelligence capability, and obtaining whatever he could beg, borrow, or steal from other major Army commands to make Desert Storm work. But it was Yeosock who married what was possible, largely General Pagonis' business, with what was thought to be required by his two corps. His life from November to February was a series of trade-offs and work arounds. He evaluated what was required and more often decided what could be done with what was available. At the same time, he balanced risks and generally strove to unencumber the corps so they could concentrate on the immediate problems of training, deploying/redeploying, and preparing for the anticipated offensive.

## **Notes**

- The CENTCOM OPLAN Desert Storm was published on 16 December. The ARCENT Plan, Desert Storm OPLAN 001, was published on 5 January. As the narrative will show, significant details remained to be resolved at each publication date. Their resolution would be documented by contingency plans and annexes published at dates later than the basic orders.
- 2. HQ, ARCENT, Command Group, briefing for the Secretary of Defense, dated 15 December 1990, slide titled, "ARCENT Concept of Operations." There are two briefings in the ARCENT Command Briefing set for the December visit of the secretary of defense. The first set, dated 15 December, appears to be the ARCENT set, the second dated 20 December, the date of the briefing itself, appears to be the CENTCOM set less the ARCENT and corps briefings.
- 3. HQ, ARCENT, Command Group, briefing for the Secretary of Defense, dated 15 December 1990, slide titled, "Commander's Intent."
- 4. HQ, ARCENT, G3 (Plans), AFRD-DTP, Memorandum for USARCENT Historian, Colonel Swain, Subject: HQ, USARCENT, G3 Plans, Historical Narrative of Desert Shield, Desert Storm, Defense and Restoration of Kuwait, and Redeployment, dated 6 April 1991, 15-16. Interview with General Frederick Franks at the Pentagon, by the Strategic Studies Institute, U.S. Army War College, Carlisle Barracks, Pennsylvania, on 31 October 1991, 19. Interview with Colonel Stan Cherrie, G3 VII Corps, at Fort Leavenworth, Kansas, 29 August 1991, 7-9 on staff resistance to CG's plan.
- HQ, ARCENT, G3 (Plans) AFRD-DTP, Memorandum for USARCENT Historian, Colonel Swain, Subject: HQ, USARCENT, G3 Plans, Historical Narrative of Desert Shield, Desert Storm, Defense and Restoration of Kuwait, and Redeployment, dated 6 April 1991, 14-15.
- Message, 120300Z FEB 91, COMUSARCENT MAIN//DT//, MSIG ID/SITREP/USARCENT/D+26/FEB, 9. ARCENT did have a contingency plan for an early attack by available forces after 31 January should it be required.
- 7. HQ, ARCENT, Command Group, briefing for the Secretary of Defense, dated 15 December 1990, slide titled, "HET Status." The fact the slide is present in the packet, of course, does not necessarily indicate the slide was briefed to the secretary or chairman. It is taken to indicate what the ARCENT commander believed to be the case on the date indicated. There were only 897 HETs in the Army inventory.
- Eric Schmitt, "Forces Not Ready for January War, U.S. General Says: Candid Assessment: Gulf Deputy Commander Seen as Undermining Bush's Diplomacy," The New York Times, 20 December 1990, A1, A20. Schwarzkopf, Doesn't Take a Hero, 394-95.
- HQ, ARCENT, Command Group, briefing for the Secretary of Defense, dated 15
  December 1990, slide titled, "Ground Force Correlation (Assuming 50% Iraqi
  Attrition by Air)."

- Baron de Jomini, The Art of War, trans. Captain G. H. Mendell and Lieutenant W.
   P. Craighill (Philadelphia, PA: J. B. Lippincott & Co., 1862, Greenwood Press Reprint, n.d.), 299.
- HQ, ARCENT, G3 (Plans) AFRD-DTP, Memorandum for USARCENT Historian, Colonel Swain, Subject: HQ, USARCENT, G3 Plans, Historical Narrative of Desert Shield, Desert Storm, Defense and Restoration of Kuwait, and Redeployment, dated 6 April 1991, 6-7.
- 12. HQ, ARCENT, G3, Memorandum for Commander, 22d SUPCOM; Commander, VII Corps; Commander, XVIII Corps, Subject: Theater Movements Plan, dated 11 January 1991, and HQ, ARCENT, Command Group, untitled briefing, dated 27 December 1990. Documents are tabs 14 and 15 to vol. 2 of HQ, USARCENT, G3 Plans, Operation Desert Shield/Storm Historical Narrative and Input into Command Report.
- HQ, ARCENT, Command Group, briefing titled, "USARCENT OPLAN 001 Desert Storm," dated 27 December 1990, section titled, "Theater Logistics Concept." General Pagonis' account in Pagonis, Moving Mountains, 118-22.
- 14. Pagonis, Moving Mountains, 135.
- HQ, ARCENT, Command Group, untitled briefing, dated 27 December 1990, slides titled, "Log Base Alpha, Bravo, etc."
- 16. Ibid., slide titled, "Medical Beds."
- 17. Ibid., slide titled, "Unit Moves,"
- 18. As to a contract comment, a story was told to author by Lieutenant Colonel Mike Kendall. Briefing slides (3) in Ibid., titled, "Asset Availability Versus Commitments." Pagonis' version in Pagonis, Moving Mountains, 136-40. Schwarzkopf's version is in Schwarzkopf, Doesn't Take a Hero, 400-401.
- 19. HQ, ARCENT, AFRD-DTP, Memorandum thru Colonel Holloway, Chief, G3 Plans, for Colonel Swain, USARCENT Historian, Subject: Command Report Operation Desert Storm, dated 16 March 1991, prepared by Major Daniel J. Gilbert, Tabs 1, 2, and 3. Interview with General Steven Arnold (in progress).
- Note from Lieutenant Colonel Mike Kendall to author on early draft of the manuscript. See comments by General Luck in transcript of MAPEX, Eskan Village School House, Tape C (27 December 1990), 8. See also Tape A, 27.
- 21. The whole question of the Syrian adherence to the plan of attack has become controversial. Schwarzkopf is clear that the Syrians balked at participation in the offensive, for whatever reason. Schwarzkopf, Doesn't Take a Hero, 401-3. De la Billiere confirms this view, de la Billiere, Storm Command, 178. Prince Khalid disputes this, pointing out that the Syrians followed the Arab attack in support when the offensive took place. Khalid, of course, is correct but does not contradict directly Schwarzkopf or de la Billiere's versions, which was one understood at ARCENT. Khalid bin Sultan, "Schwarzkopf Falls Short in Writing History," Army Times, 2 November 1992, 21.

- 22. Comments made to author by General Yeosock after review of draft manuscript. General Yeosock indicated that this "recon by fire" was a technique he felt bound to use with the CINC. Similar comments were made by his executive officer, Lieutenant Colonel Kendall, in notes returned on a draft manuscript in possession of the author. See also the interview with Lieutenant General John Yeosock, Fort McPherson, Georgia, 29 June 1991, 5-6. For interalliance bickering, see Schwarzkopf, Doesn't Take a Hero, 401-5. De la Billiere addresses security lapse and data (4 January) of the Alliance Grand Review, de la Billiere, Storm Command, 179-81, 183.
- 23. Major Dan Gilbert was the slide turner for the 4 January briefing and described the "atmospherics" to the author. Lieutenant Colonel Gilbert has provided the author with some notes and recollections of the contretemps in response to reviewing an early draft of this chapter.
- Lieutenant Colonel Kendall's handwritten comments on draft manuscript, 143

  –45.
   General Yeosock to author.
- 25. Lieutenant Colonel Gilbert's contemporary note reads: "Briefed CinC—Changed all. Said plan stinks/not doable. Ranted/raved. Now I understand 'Storming Norman' nickname." HQ, ARCENT, G3 (Plans) AFRD-DTP, Memorandum for USARCENT Historian, Colonel Swain, Subject: HQ, USARCENT, G3 (Plans), Historical Narrative of Desert Shield, Desert Storm, Defense and Restoration of Kuwait, and Redeployment, dated 6 April 1991, 15-16.
- Letter to author from Lieutenant Colonel Dan Gilbert, dated 4 March 1992, with notes of 4 January briefing to CINC.
- 27. Ibid.; and Purvis Group Diary, 16.
- Interview with Colonel Stan Cherrie, VII Corps G3, at Fort Leavenworth, Kansas, 29 August 1991, 21-22.
- Transcript of the ARCENT MAPEX, Tape A, 27 December 1990 and Tape E, 27 December 1990.
- Comments made to author by General Yeosock after review of draft manuscript.
- 31. Lieutenant Colonel Kendall's handwritten comments on draft manuscript, 155.
- Interview with General Frederick Franks, Fort Leavenworth, Kansas, 6 March 1992, 40.
- 33. HQ, 2d Armored Cavalry Regiment, AETSAC-AT, Memorandum, Subject: 2ACR Staff Exercise After-Action Report, dated 27 December 1990, attached briefing shows a twelve to twenty-four-hour pause on PL Smash. HQ, 1st Armored Division, TAA Thompson (KTO) 141200C February 1991, Operations Order #6-9lm (attack/movement to contact). Para 3B(C) reads: "Units will pause at Atk Python to consolidate, tactically rearm, refit, refuel, and posture for future operations."
- 34. Transcript of the ARCENT MAPEX, Tape B, 30 December 1990.
- 35. As indicated above, the trend was for the VII Corps to push its main attack as far west as possible.

- 36. General Waller turned down such a request while he was ARCENT commander from 13-23 February, and General Franks indicates that he thought of requesting such attachment the night of 27 February but felt the question would only lead to an argument with XVIII Corps and did not pursue it. Interview with General Calvin Waller by General Timothy J. Groggin, et al., on 2 May 1991, 93. Interview with General Frederick Franks at Fort Leavenworth, Kansas, 6 March 1992, 38-39. One can only speculate that there was resistance to taking the one heavy force assigned to XVIII Corps and attaching it to VII Corps at the climax of the battle, largely reducing the XVIII Airborne Corps to a mopping-up force with the exception of the plentiful AH-64 units that were conducting the ARCENT's deep battle.
- 37. The term "turning force" is used advisedly. The attack down the Euphrates valley to assist in destruction of the Republican Guard seems always to have been somewhat tentative; it remained an on-order mission. On the other hand, cutting Highway 8 is a clear initial mission. Cutting the LOC is a turning movement.
- 38. B. H. Liddell Hart, Thoughts on War (London: Faber and Faber, 1944), 63-64.
- 39. HQ, ARCENT, Command Group, briefing titled, "Purpose: To Back Brief ARCENT Scheme of Maneuver for Operation Desert Storm," dated 8 January 1991. Of great interest is the note that the plan was to be executable by 15 February with a contingency plan capable of execution by 25 January. HQ, ARCENT, G3 (Plans), AFRD-DTP, Memorandum for USARCENT Historian, Colonel Swain, Subject: HQ, USARCENT, G3 Plans, Historical Narrative of Desert Shield, Desert Storm, Defense and Restoration of Kuwait, and Redeployment, dated 6 April 1991, 15-16.
- 40. This difference of view about the anticipated enemy resistance continued through the briefing to the secretary of defense. The pessimistic view was generally agreed to in the author's hearing at the rehearsal briefing by ARCENT commanders at HQ, ARCENT, prior to the final briefing for the secretary of defense. Also, see Lieutenant Colonel Kendall's handwritten comments on draft manuscript, 158-59. Kendall notes that at a prebrief for the CINC that he attended with General Yeosock prior to the secretary of defense briefing, the CINC again blew up, first because General Arnold addressed an ARCENT employment of the 1st Cavalry Division(-), which by then was tied to the success of the Egyptian attack, and he (Arnold) used the words "operational pause." Kendall writes: "Again CinC signaled he didn't expect heavy opposition to the ground assault. It was obvious his commanders didn't agree but they were not about to raise the issue at the Sec Def brief."
- 41. The author heard General Franks make these points at briefings in Saudi Arabia and discusses them in interview with General Frederick Franks at Fort Leavenworth, Kansas, 6 March 1992.
- 42. After writing this chapter, one of the author's research assistants discovered a memorandum from Colonel Don Holder to General Franks that raised concerns about the complexity of coordinating the corps' advance in light of the sequential nature of the tasks to be accomplished in the breach. Colonel Holder was commander of the 2d Armored Cavalry Regiment. He is as sober a tactician as the Army owns and a former director of the School of Advanced Military Studies and principal author of the Army's AirLand Battle Doctrine. HQ, 2d Armored Cavalry

- Regiment, AETSAC, Memorandum for VII Corps TAC (Attn: G3), Subject: Comments on VII Corps FRAGPLAN #7, dated 230900 February 1991.
- 43. HQ, ARCENT, Command Group, briefing titled, "Commander's Huddle," dated Friday, 1 February 1991 (D+15).
- Transcript of Frost interview dated 22 March 1991 in possession of author, 16. HQ, ARCENT, Command Group, Memorandum for Record, Subject: Notes from Huddle Meeting, 1 February 1991, dated 1 February 1991.
- HQ, ARCENT, Command Group, Memorandum for Record, Subject: Notes from Huddle Meeting, 1 February 1991, dated 1 February 1991.
- 46. Ibid. The ARCENT Desert Storm operation order did not contain a plan for destruction of the Republican Guard. That annex was not published, rather the G3 Plans section prepared a number of contingency plans one of which would be selected at some appropriate point for implementation to achieve the ARCENT mission in accordance with circumstances then obtaining. This will be discussed at some length hereafter. See HQ, ARCENT, AFRD-DTP, Memorandum thru Colonel Holloway, Chief, G3 Plans, for Colonel Swain, USARCENT Historian, Subject: Command Report Operation Desert Storm, dated 16 March 1991, prepared by Major Daniel J. Gilbert, 4-6.
- 47. HQ, ARCENT, Command Group, Memorandum for Record, Subject: Notes from Huddle Meeting, 1 February 1991, dated 1 February 1991.
- 48. HQ, ARCENT, Command Group, briefing titled, "Commander's Huddle," dated Friday, 1 February 1991 (D+15).
- 49. Lieutenant Colonel Kendall's handwritten comments on draft manuscript, 158-59.
- 50. The issue of the timing of the attack is discussed in HQ, ARCENT, AFRD-DTP, Memorandum thru Colonel Holloway, Chief, G3 Plans, for Colonel Swain, USARCENT Historian, Subject: Command Report Operation Desert Storm, dated 16 March 1991, prepared by Major Daniel J. Gilbert, 5, and enclosure 29. It was a matter of discussion at the "commander's huddle." HQ, ARCENT, Command Group, Memorandum for Record, Subject: Notes from Huddle Meeting, 1 February 1991, dated 1 February 1991. HQ, ARCENT, Command Group, briefing titled, "Commander's Huddle," dated Friday, 1 February 1991 (D+15).
- Schwarzkopf, Doesn't Take a Hero, 433-34.
- 52. Sir Peter de la Billiere expresses the ambiguity felt by many, noting on the one hand anticipation of a costly battle and, on the other, a private optimism that the Iraqi Army would collapse under air attack before the ground attack went in. De la Billiere, Storm Command, 277.
- 53. HQ, ARCENT, Command Group, ARCENT Update, dated 8 February 1991, slide titled, "Battle Damage Estimate." The slide showed a BDA assessment of only 23 percent on 9 February.
- 54. Ibid., slide titled, "Force Generation/Air Campaign."

- 55. General Yeosock told the author that among the first things he told his G2 to track was the matter of whether or not the Iraqis in the KTO were conducting unit training. Absent evidence of such training for the period of occupation, Yeosock concluded, rightly it turned out, that the Iraqi armored forces were incapable of tactical maneuver as opposed to tactical movement. Assessments are in, HQ, ARCENT, Command Group, ARCENT Update, dated 8 February 1991, slide titled, "Commander's Assessment."
- 56. Schwarzkopf, Doesn't Take a Hero, 434.
- 57. The author was present at the briefing.
- 58. General Franks to the author.
- This third category was suggested to me by Professor Jim Schneider, SAMS, USACGSC, Fort Leavenworth, Kansas.